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ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

To carry out the purpose for which it was founded thirty-two years ago, the National Geographic Society publishes this Magazine. All receipts from the publication are invested in the Magazine itself or expended directly to promote geographic knowledge and the study of geography. Articles or photographs from members of the Society, or other friends, are desired. For material that the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelope and postage, and be addressed: Editor, National Geographic Magazine, 16th and M Streets, Washington, D. C.

Important contributions to geographic science are constantly being made through expeditions financed by funds set aside from the Society's income. For example, immediately after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. So important was the completion of this work considered that four expeditions have followed and the extraordinary scientific data resultant given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures, evidently formed by nature as a huge safety-valve for erupting Katmai. By proclamation of the President of the United States, this area has been created a National Monument. The Society organized and supported a large party, which made a three-year study of Alaskan glacial fields, the most remarkable in existence. At an expense of over $50,000 it has sent a notable series of expeditions into Peru to investigate the traces of the Inca race. The discoveries of these expeditions form a large share of the world's knowledge of a civilization which was waning when Pizarro first set foot in Peru. Trained geologists were sent to Mt. Pelee, La Soufriere, and Messina following the eruptions and earthquakes. The Society also had the honor of subscribing a substantial sum to the historic expedition of Admiral Peary, who discovered the North Pole April 6, 1909. Not long ago the Society granted $20,000 to the Federal Government when the congressional appropriation for the purchase was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people and incorporated into a National Park.

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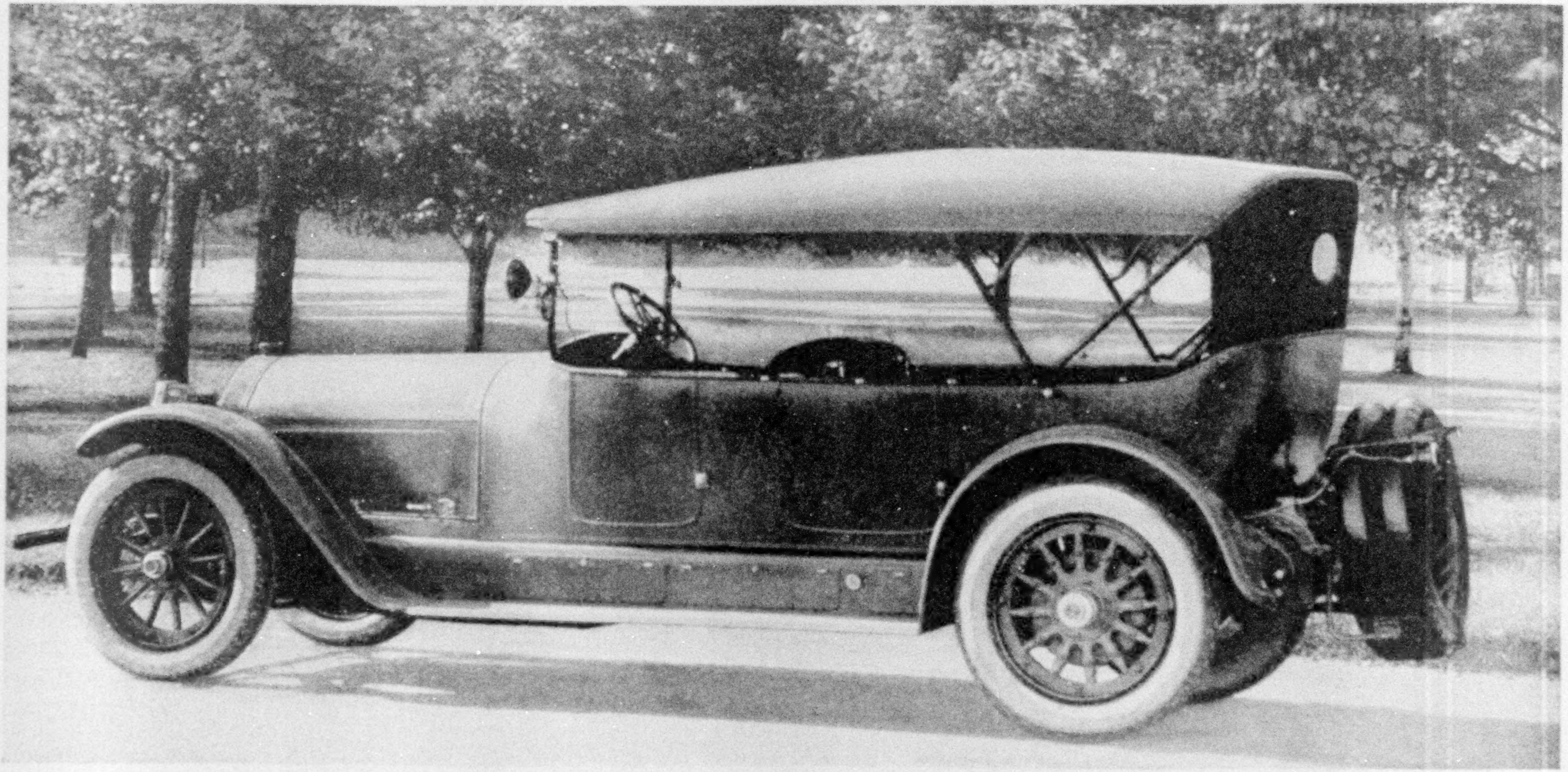
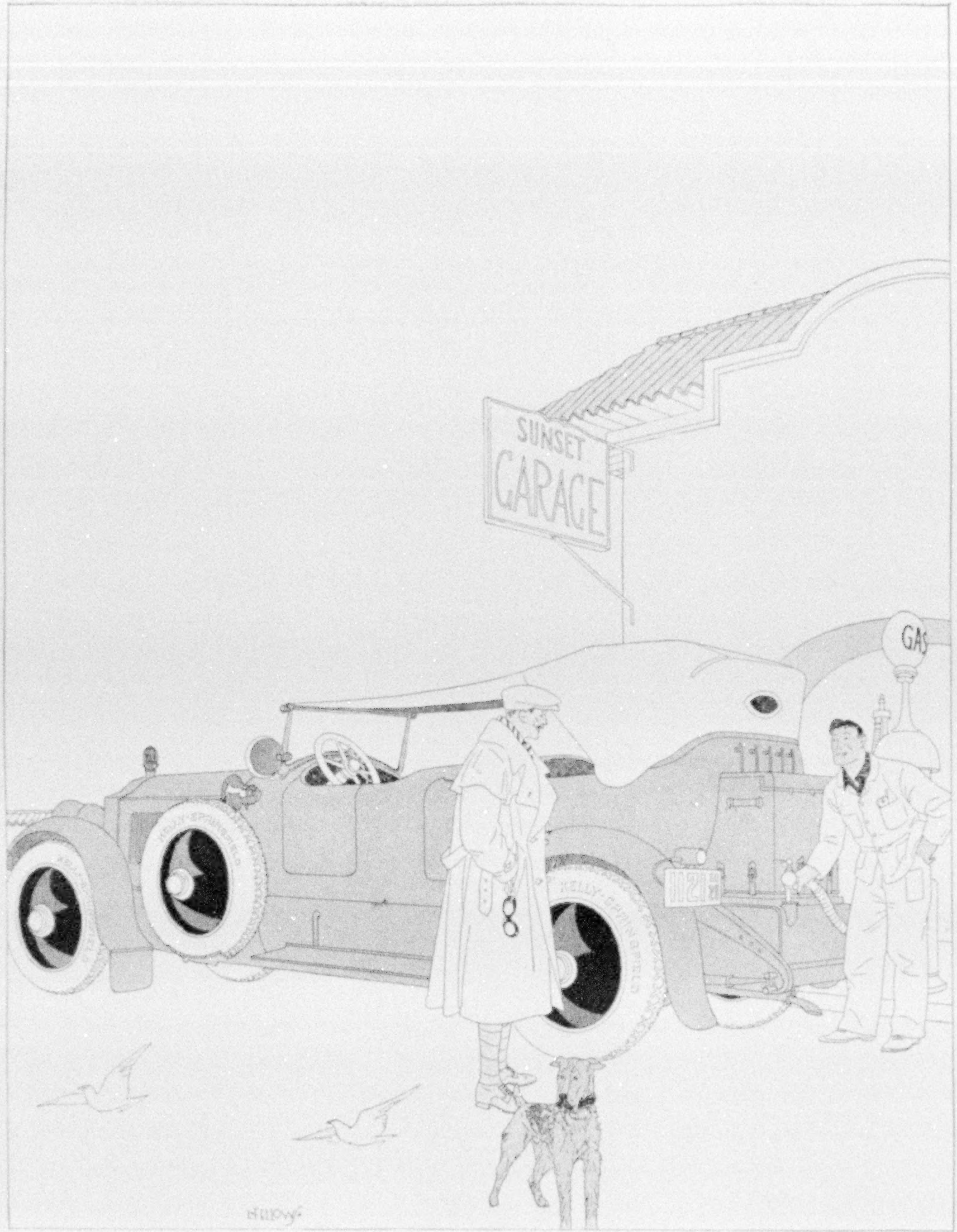


LOCOMOBILE TOURING CAR FOR SEVEN PASSENGERS

Built *in New England because that is the home of fine workmanship.*

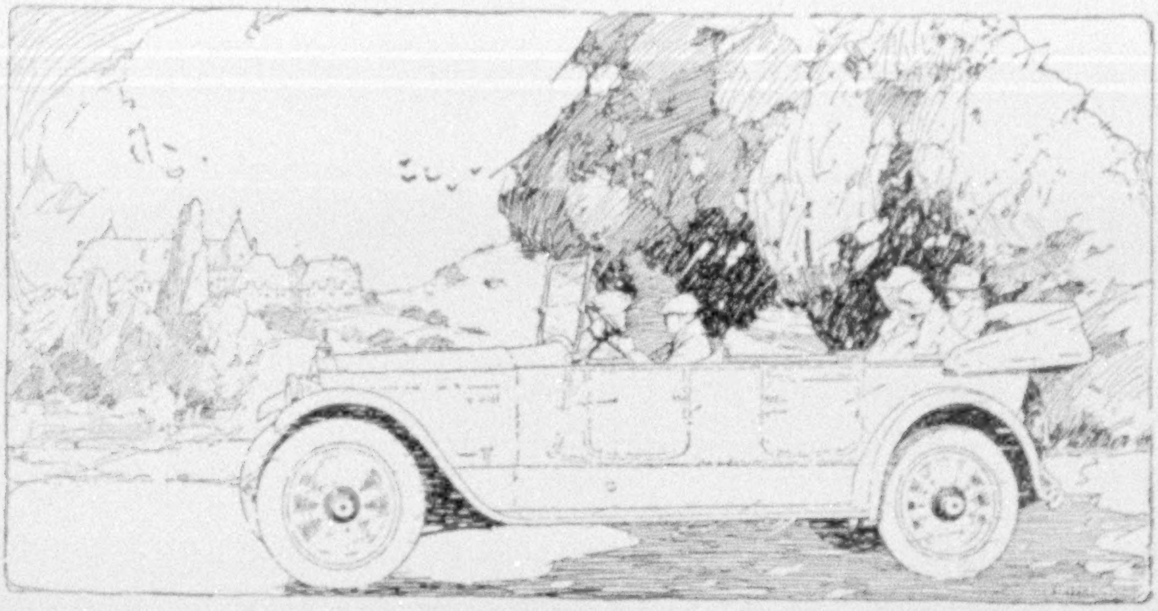
HARE'S MOTORS, INC., NEW YORK CITY

We Shall Keep Faith



"You've come all the way from New York to San Francisco without a blowout? Those must be some tires you have!"

"They are. Kelly-Springfields, you know."



How Many Buyers Can Judge *Value?*

NEARLY every man has his visions of finding the ideal motor car. He anticipates the true mastery of the roads at last, and the prestige of being *right* at every point of his motoring.

For the man who wants the Packard qualities in his motoring, only the Packard Car will do. While if his taste and sense of values are not up to the Packard, some other car will do.

The Packard Twin-Six really is as true and fine as anyone ever assumed any car to be.

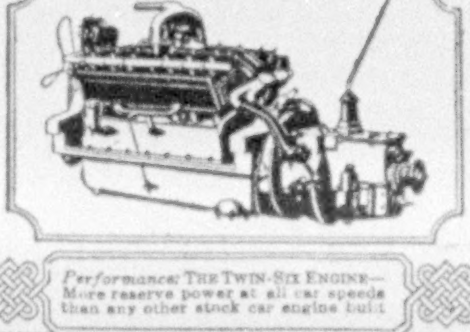
It occupies, alone and sufficient, the place it has made for itself. It stands aloof equally from the car that obviously can be no better than it looks, and from the car that strives to look better than it is.

The dominant place of the Packard is not a thing of chance. For twenty-one years the Packard has been delivering *intrinsic value*—the soundest value a motor car has ever given.

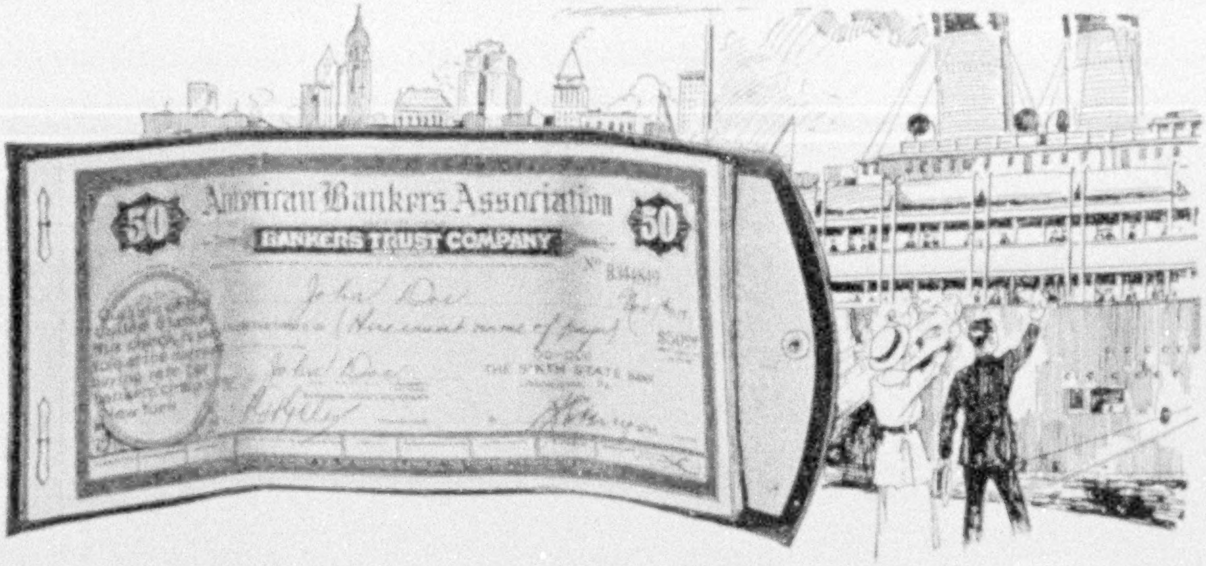
During the War, inspecting officers spoke of the Packard plant as a manufacturing marvel. The only automobile plant in the world to produce high-grade cars on a quantity basis.

Why this tremendous plant investment? Simply to produce a car of Packard grade at a price within reason. If built by piecemeal methods the Packard would be the highest priced car in the world.

PACKARD MOTOR CAR COMPANY • DETROIT



Performance: THE TWIN-SIX ENGINE—More reserve power at all car speeds than any other stock car engine built



Bon Voyage!

To insure a good voyage and a pleasant trip abroad as far as money matters are concerned, most fore-sighted travelers carry their funds in the form of

"A·B·A" American Bankers Association Cheques

Through the Bankers Trust Company's foreign service arrangements have been made so that travelers holding "A·B·A" Cheques may exchange them, on arrival in Europe, for other "A·B·A" Cheques stamped with their equivalent in sterling, francs or lire, etc., based upon the current exchange rate

"A·B·A" Cheques are issued in denominations of $10, $20, $50 and $100, and are put up in convenient leather wallets—at almost any bank in the United States and Canada.

For full information write to

Bankers Trust Company

New York City

Puffed
Wheat

More Bubble Grains

Millions of dishes coming

Direct from the harvest fields we get the choicest wheat that grows. Then we seal the grains in guns, apply a fearful heat and explode them. They come out as bubble grains, flimsy and flaky—puffed to eight times normal size. Yet the grains remain shaped as they grew.

Every night of the coming year millions of children will enjoy this Puffed Wheat in their bowls of milk.

Three grains now exploded

Three grains are now puffed by Prof. Anderson's process, and each has its own delights.

Puffed Wheat and Puffed Rice are whole grains. Corn Puffs are corn hearts puffed.

All are thin and airy—all have exquisite flavor. And every food cell is blasted for easy, complete digestion.

Serve all of them in all the ways you can, for no other form of grain food can compare with these.

Puffed Wheat | Puffed Rice | Corn Puffs

Also Puffed Rice Pancake Flour

For nutty, fluffy pancakes

Now we make a pancake flour mixed with ground Puffed Rice. It makes nut-like, fluffy pancakes—the finest ever tasted. The flour is self-raising, so the batter is made in a moment. Try this new dainty. Ask for Puffed Rice Pancake Flour.

The Quaker Oats Company
Sole Makers

The World's Great Timber Supply

From the great forests of the North and Northwest comes timber, which, converted into a diversity of forms, is used in all parts of the world. In this territory tributary to Chicago is one of the greatest of the world's timber supplies. Here every year are felled hundreds of thousands of towering trees to be transported by steam and river, lakes and railroads to the mills and factories of the manufacturing district centering in Chicago, where they are made into building materials, vehicles, implements, furniture and endless other products.

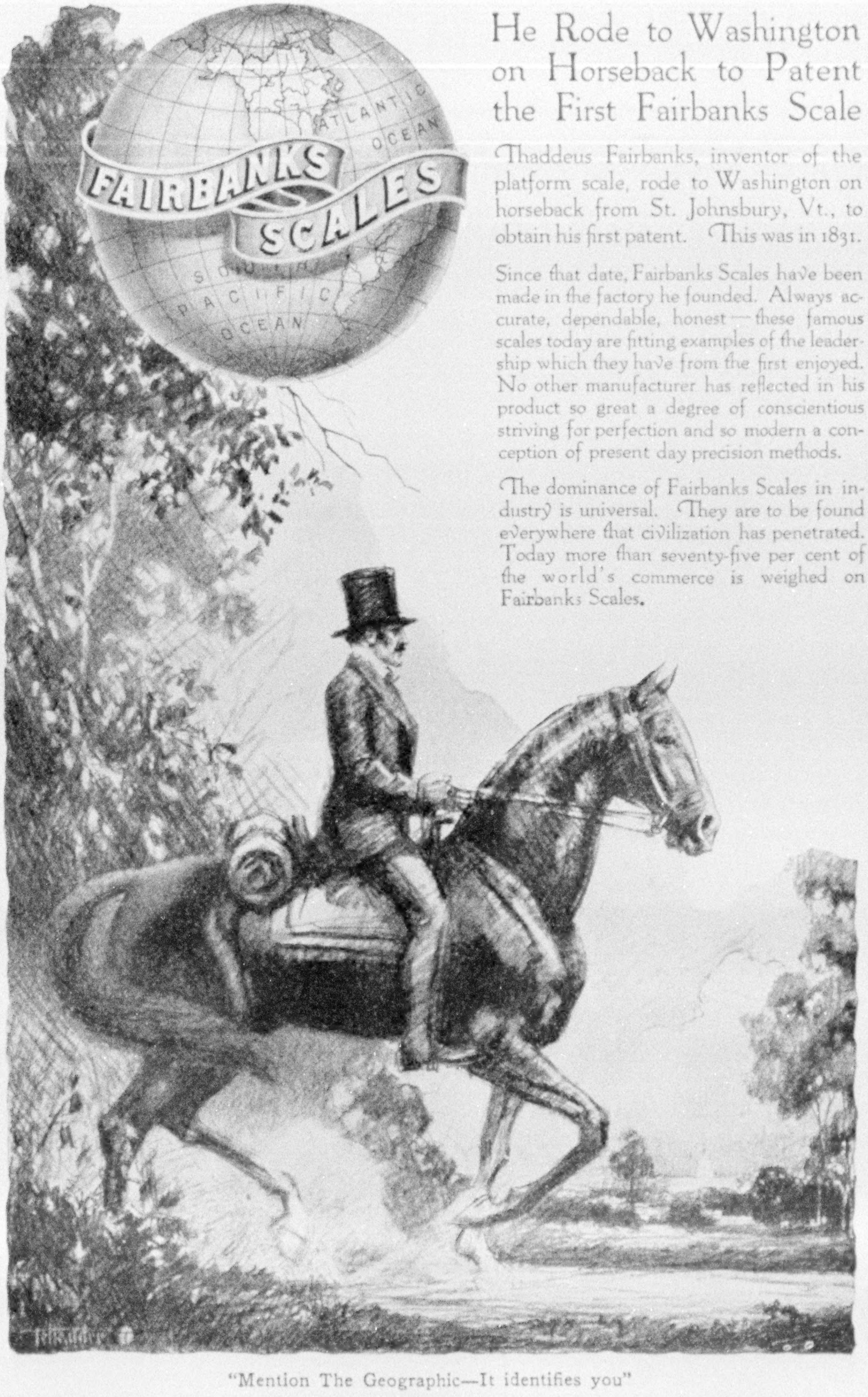
THE Continental & Commercial Banks for many years have assisted this great industry with dependable financial service. Today they are co-operating actively for its further development.

The CONTINENTAL *and* COMMERCIAL BANKS

CHICAGO

Invested capital more than 50 Million Dollars

Resources more than 500 Million Dollars

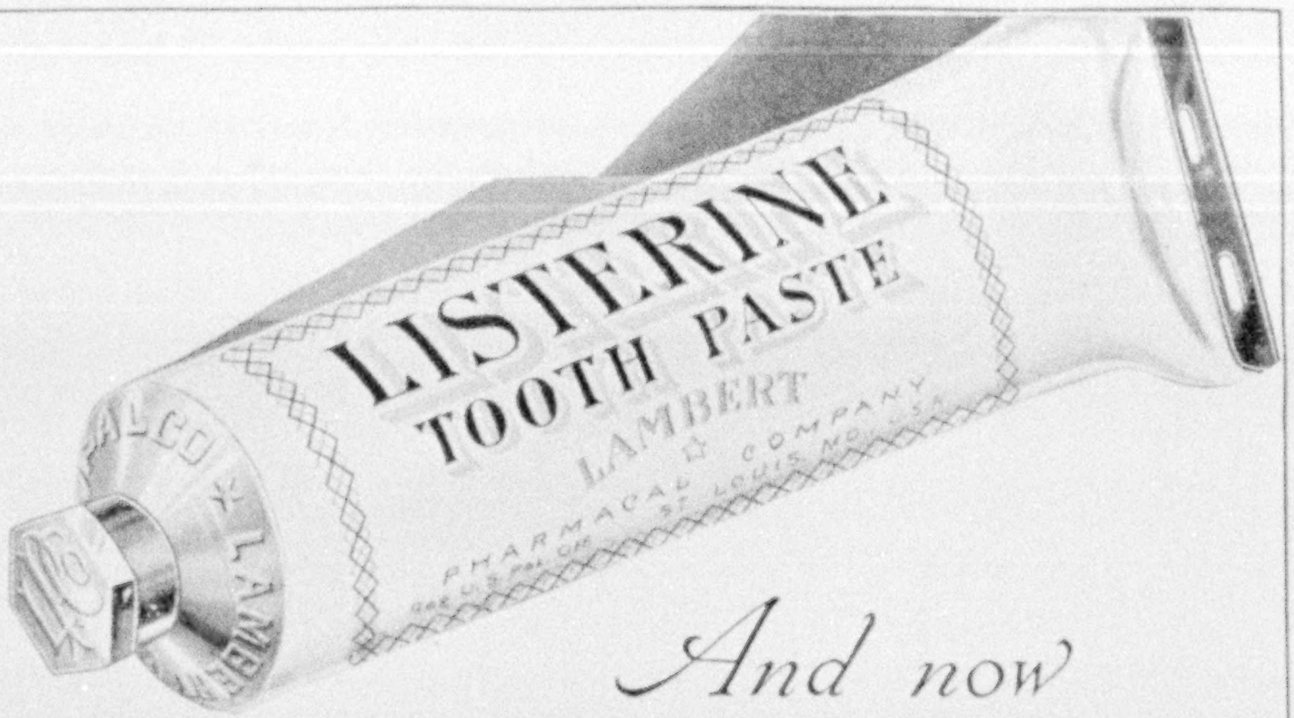


He Rode to Washington on Horseback to Patent the First Fairbanks Scale

Thaddeus Fairbanks, inventor of the platform scale, rode to Washington on horseback from St. Johnsbury, Vt., to obtain his first patent. This was in 1831.

Since that date, Fairbanks Scales have been made in the factory he founded. Always accurate, dependable, honest — these famous scales today are fitting examples of the leadership which they have from the first enjoyed. No other manufacturer has reflected in his product so great a degree of conscientious striving for perfection and so modern a conception of present day precision methods.

The dominance of Fairbanks Scales in industry is universal. They are to be found everywhere that civilization has penetrated. Today more than seventy-five per cent of the world's commerce is weighed on Fairbanks Scales.



And now

LISTERINE
TOOTH PASTE

YOU KNOW how good Listerine is for your mouth and teeth—as a mouth wash. So you are interested at once in this announcement of Listerine Tooth Paste.

Naturally, you feel that the makers of Listerine must produce the best dentifrice possible—different from all others. And you are quite right. The reputation of Listerine has created an obligation for its makers.

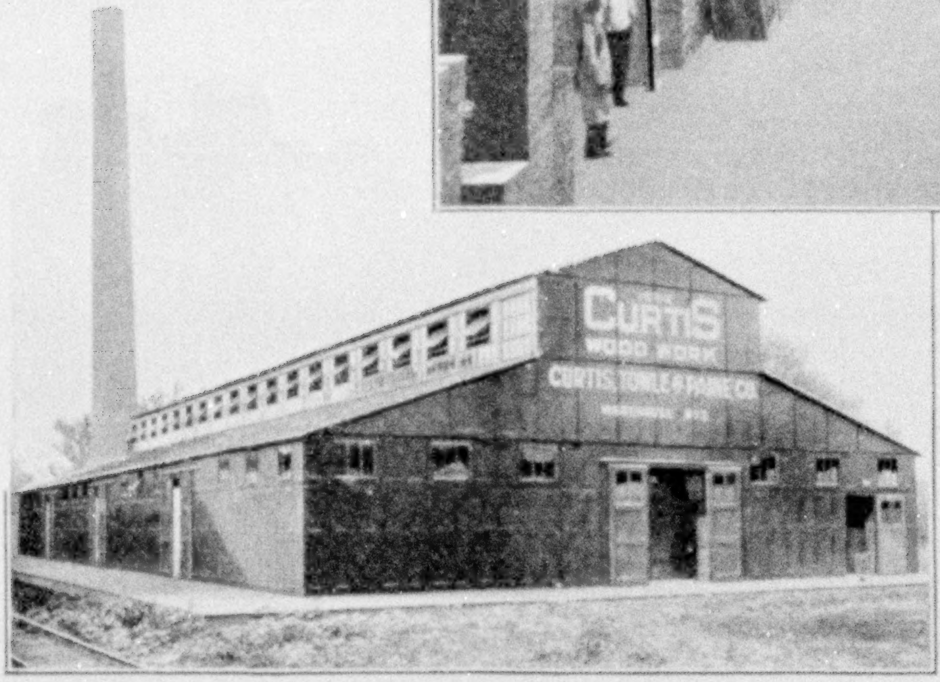
Listerine Tooth Paste contains a pleasant fruit acid, for the best scientific reason—to stimulate the flow of saliva. This increased flow is alkaline—the best natural corrective of what is called acid mouth. It overcomes an unhealthy acid condition.

Also the fruit acid in Listerine Tooth Paste tends to prevent "tartar"—a cause of pyorrhea.

LAMBERT PHARMACAL COMPANY

ST. LOUIS U.S.A. ☆ BROOKLYN, U.S.A.

Interior and Exterior Views
Truscon Standard Building
Curtis, Towel & Paine Co.,
Lincoln, Nebraska



Standard Buildings For All Uses

Industry of every kind finds Truscon Standard Buildings of very great value. Not only do these buildings eliminate fire hazard, but the ease, rapidity, and economy with which they are erected provide a practical solution to the problem of high building costs.

Truscon Standard Buildings cost less than any other type of permanent construction. They are built entirely of interchangeable steel panels and can be enlarged or taken down and re-erected with 100% salvage value. Walls and roof are made of Truscon Alloy Steel which has proven its superior durability and permanence by exposure tests over a period of years.

Truscon Standard Buildings are furnished in many types and practically every size with hip, monitor, or sawtooth roof. Fireproof, well ventilated, and affording maximum daylight, they make ideal factories, machine shops, foundries, warehouses, tool rooms, freight sheds, and cafeterias.

Return coupon today, checking the size and purpose of the building you require.

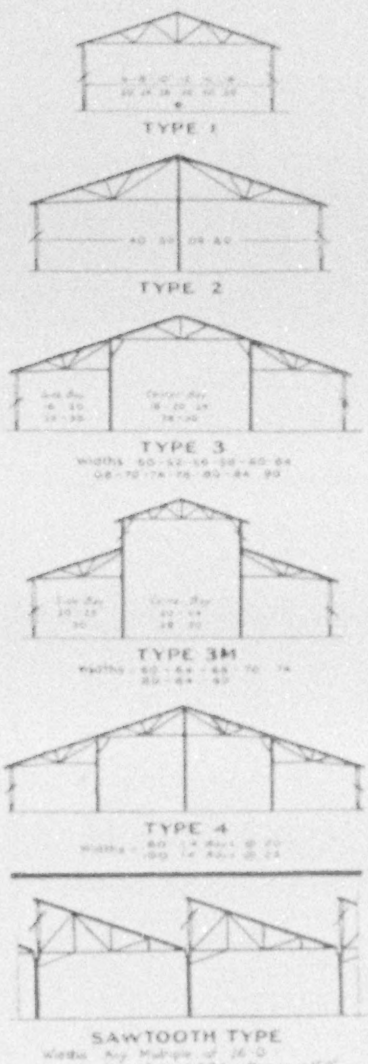
TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO
Warehouses and Sales Offices in Principal Cities

TRUSCON
STANDARD BUILDINGS

INFORMATION COUPON

Diagrams show Types and Sizes of
TRUSCON STANDARD BUILDINGS
——Fill out Coupon below——

LENGTHS - Any Multiple of 2'-0"
HEIGHTS - Curb to Eave 7'-10" or 11'-6"
LANTERN - 12'-0" wide provided at Ridge of any Building 40'-0" or more in width



Truscon Steel Company, Youngstown, Ohio
Send Catalog and Information on Truscon Standard Buildings. Type ________ Width ________ ft., Length ________ ft., Height ________ ft.
To be used for ____________
Name ____________
Address ____________

The Heat is there- why not Use it?

"This Car Has a Perfection Motor Car Heater"

PERFECTION MOTOR CAR HEATERS

Some of the cars using Perfection Motor Car Heaters as Standard Equipment on one or more models:

Allen Case
Cole Aero Eight
Columbia
Crow Elkhart
Davis
Dixie Flyer
Dorris Du Pont
Gardner
Grant
Haynes Holmes
Hudson
King Kissel
Liberty
Maibohm
Marmon
Mercer
Mitchell Moon
National
Northway Motors Corp. (Truck Cab Bodies)
Oakland
Oldsmobile
Paige
Premier all models
Re Vere Roamer
R. & V.
Scripps-Booth
Standard 8
Stutz
Stephens Salient Six
Templar
Velie Westcott
Willys-Knight
Yellow Taxicabs of Chicago

PERFECTION HEATERS
TRADE MARK

Automobile salesmen point with pride to a Perfection Heater because no motor car is complete without one. A Perfection Motor Car Heater is now recognized as a necessary part of automobile equipment.

A Perfection Heater adds warmth and comfort to your car on the coldest winter day, and makes fall and spring motoring more enjoyable. The Perfection Heater equipped car is used in comfort every day in the year.

Not merely a foot-warmer but a real heating plant. Utilizes exhaust gases. No operating expense—"The Heat is There—Why Not Use It?"

Forty-five prominent automobile manufacturers have provided for the owner's comfort by adopting Perfection Motor Car Heaters as Standard equipment on one or more models. *Be sure your new car is so equipped.*

Perfection Heaters may be readily installed in new or old cars, both open and closed models. Write for name of local dealer handling Perfection Motor Car Heaters.

The Perfection Heater & Mfg. Co.
6547 Carnegie Ave. Cleveland, Ohio

Manufactured in Canada by Richards-Wilcox Canadian Co., Ltd
London, Ontario

See How Essex Proved Economy

A Nation-Wide Demonstration No Motorist Can Overlook

Connecticut—With 12 cars over Mohawk Trail and Hoosick Mountains and 12 over a coast route—many owner driven—216 miles average distance per car, 18.7 miles per gallon were shown. One car with 35,000 miles service averaged 21.2 miles per gallon.

Nebraska—A Hastings, Neb., woman drove her Essex from Lincoln to Hastings, 109 miles, averaging 28 miles per gallon.

California—Four women drove from Los Angeles to San Francisco and return averaging 22.3 miles per gallon. A San Francisco Essex made the round trip, 846 miles, in 33 hours with 23 miles per gallon. Hood and radiator sealed.

San Antonio, Tex.—In a 166 mile run to Austin and return, Essex averaged 25.5 miles per gallon.

Sacramento, Calif.—Defeated 19 entries and took Tallac Cup for highest gasoline, oil and water mileage in Sacramento Dealers' reliability run.

Baltimore, Md.—Essex sedan, on original tires with 15,000 miles service, traveled 22.1 miles over Maryland hills, averaging 23 miles per gallon.

Florida—On a measured gallon an Essex covered 23 miles and without change or adjustment of any kind showed speed of 68 miles per hour.

49 Cars Average 18.9 Miles Per Gallon—Records cover every kind of test at a speed of from 5 to 72 miles per hour.

Los Angeles, Calif.—To San Francisco, over 828 mile route of steep grades and frequently far from water, an Essex which had previously gone 28,000 miles, made trip sealed in high gear with sealed hood and sealed radiator, under U. S. Marine observation. Average 22.8 miles per gallon gasoline.

Also Broke World's Dirt Track Record—1,261 Miles

Made at Dallas, Texas, by a Car That Had Already Gone 12,000 Miles

From the mere standpoint of gasoline mileage, Essex in its nation-wide tests showed a performance worthy of cars which possess that advantage as their principal quality.

Records were kept on 49 cars. They averaged 18.9 miles to the gallon.

But bear in mind this was not done by taking advantage of every device possible to increase gasoline mileage. Under conditions of that sort, Essex showed as high as 37 miles to the gallon. However, men don't drive that way. How obviously unfair it would be, therefore, to offer such carefully economized fuel mileage tests as typical of all Essex cars.

In the Essex tests, conditions and performances adverse to gasoline economy obtained.

These cars were being driven at speeds from 5 to 72 miles per hour. They were reeling off thousands of miles over all sorts of roads in inter-city runs that set new time marks. They were making new hill-climb, acceleration and endurance records.

Many were owner cars—owner driven. Women piloted some.

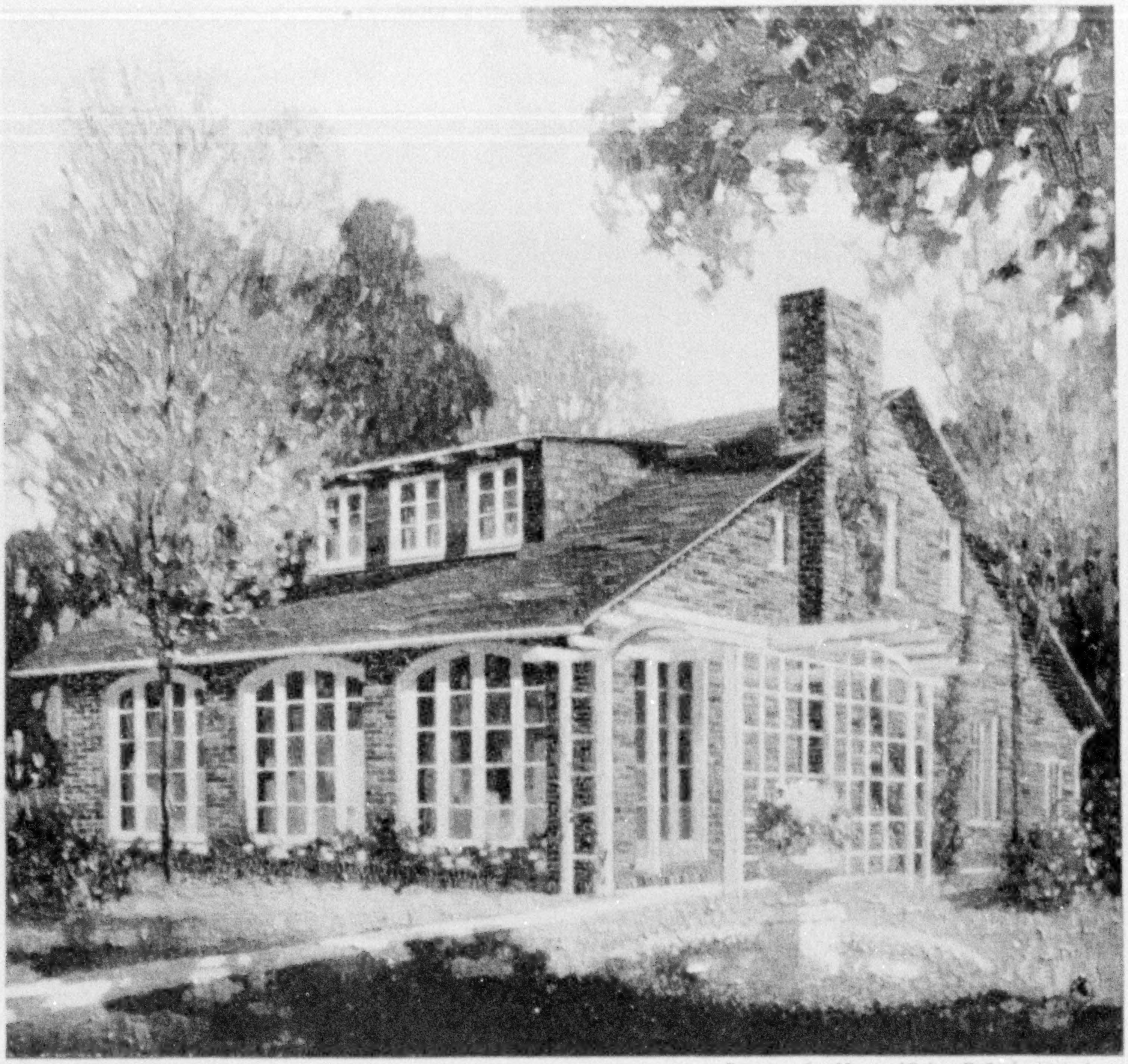
Some of the Essex cars used had already traveled upwards of 30,000 to 35,000 miles.

So you must not view Essex economy merely by its gasoline consumption. You must also consider its endurance and reliability.

If there were nothing more striking about the Essex than its gasoline mileage, it would be a worthy subject of our advertising. But important and impressive as that fact is, do not its other qualities take first rank in your consideration?

WATCH the ESSEX

"Mention The Geographic—It identifies you"



Painting after House of Robert E. Seyfarth, Architect

The Beauty and Character of the HOUSE *of* BRICK

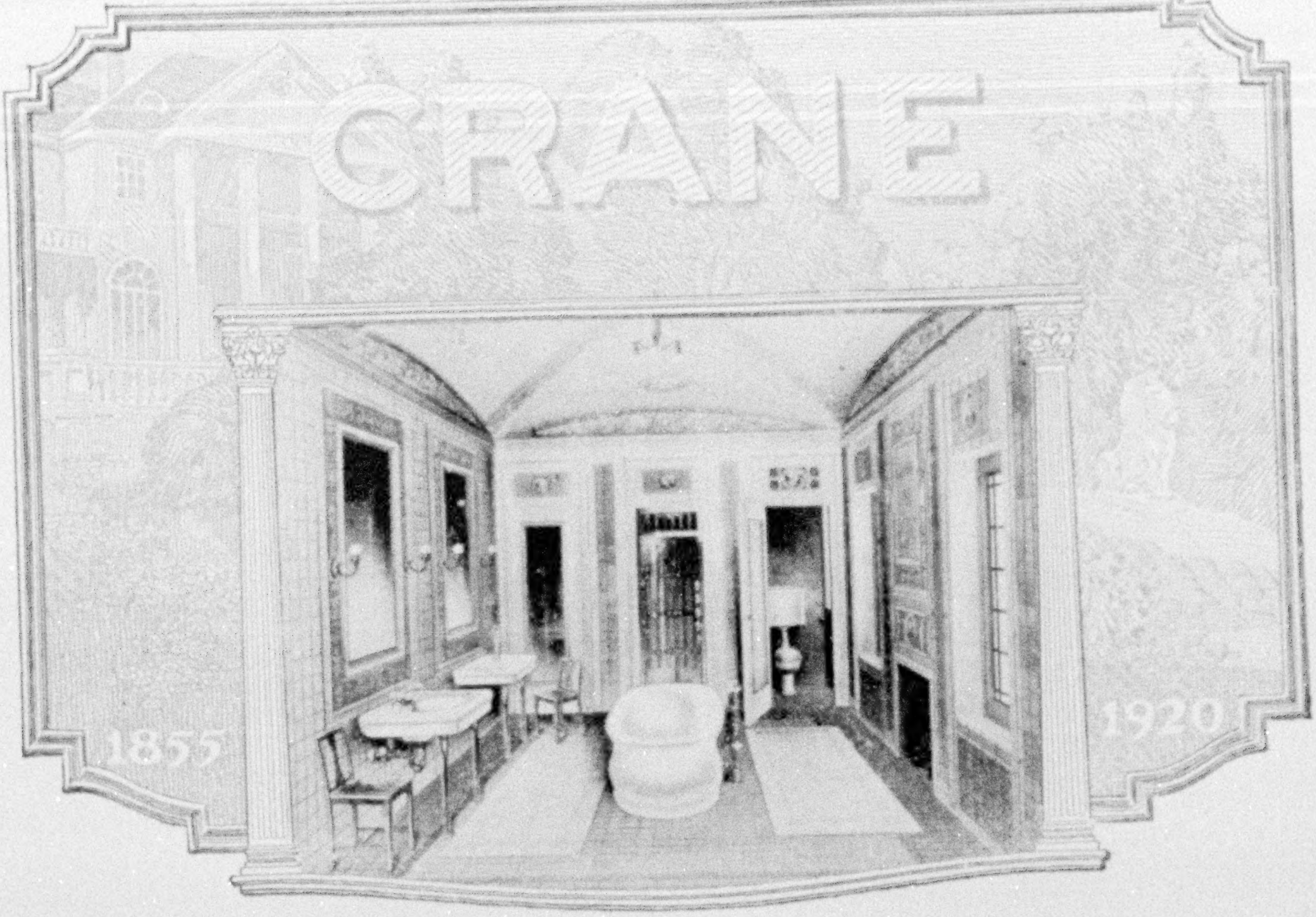
BEAUTY and character are the qualities we want our homes to express. They are not dependent on size and cost, but on design and materials. Through its wide variety of color tones and textures, Face Brick offers artistic possibilities beyond the scope of other materials; and by its durability and fire-safety, and by reducing repairs, depreciation, insurance rates and fuel costs to a minimum, it is the most economical material in the long run, for the cottage as well as for the mansion. These matters are fully discussed in "The Story of Brick."

A·F·B·A
USE FACE BRICK
—it Pays

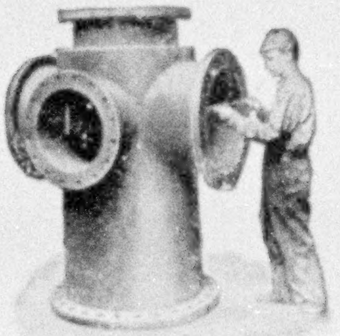
"The Story of Brick"

An artistic booklet with attractive illustrations and useful information for all who intend to build. The Romance of Brick, Extravagance of Cheapness, Comparative Costs, How to Finance the Building of a Home, are a few of the subjects treated. Your copy is awaiting your request. Send today.

The American Face Brick Association
1137 *Westminster Building, Chicago*



Making Uniform Quality Easy to Obtain



From heating, plumbing and kindred installations for the home to the pipeline requirements of the industrial world is a broad step, but one which is covered by Crane Service. Accompanying photo shows a special cast-iron flanged cross recently supplied by the Crane Co. for a plant installation. This huge fitting weighed about 3300 pounds.

From the roughed-in piping of a building, or the smallest bathroom accessory, to an entire heating plant or drainage system—or a completely equipped bathroom, kitchen or laundry—practically everything required can be obtained, through the plumbing and heating trade, from one reliable source—

CRANE

Supplementing the Crane Service which is available everywhere through the trade, Crane exhibit rooms in cities all over the country give buyers the added convenience and satisfaction of basing their decisions on displays covering every phase of heating, plumbing and sanitation. This personal selection provides a basis of thorough understanding between owner, architect and plumbing contractor.

THERE IS A NEARBY CRANE BRANCH TO GIVE YOU CRANE SERVICE

CRANE CO.

836 S. MICHIGAN AVE. CHICAGO

VALVES-PIPE FITTINGS-SANITARY FIXTURES

CRANE EXHIBIT ROOMS

23 WEST 44TH ST. AND 22 WEST 45TH ST., NEW YORK CITY

TO WHICH THE PUBLIC IS CORDIALLY INVITED

BRANCHES: FIFTY-NINE LEADING CITIES • WORKS: CHICAGO, BRIDGEPORT

BOSTON
SPRINGFIELD
BRIDGEPORT
ROCHESTER
NEW YORK
ALBANY
BROOKLYN
PHILADELPHIA
READING
NEWARK
CAMDEN
BALTIMORE
WASHINGTON
SYRACUSE
BUFFALO
SAVANNAH
ATLANTA
KNOXVILLE
BIRMINGHAM
MEMPHIS
LITTLE ROCK
MUSKOGEE

TULSA
OKLAHOMA CITY
WICHITA
ST. LOUIS
KANSAS CITY

TERRE HAUTE
CINCINNATI
INDIANAPOLIS
DETROIT
CHICAGO

ROCKFORD
OSHKOSH
GRAND RAPIDS
DAVENPORT
DES MOINES

OMAHA
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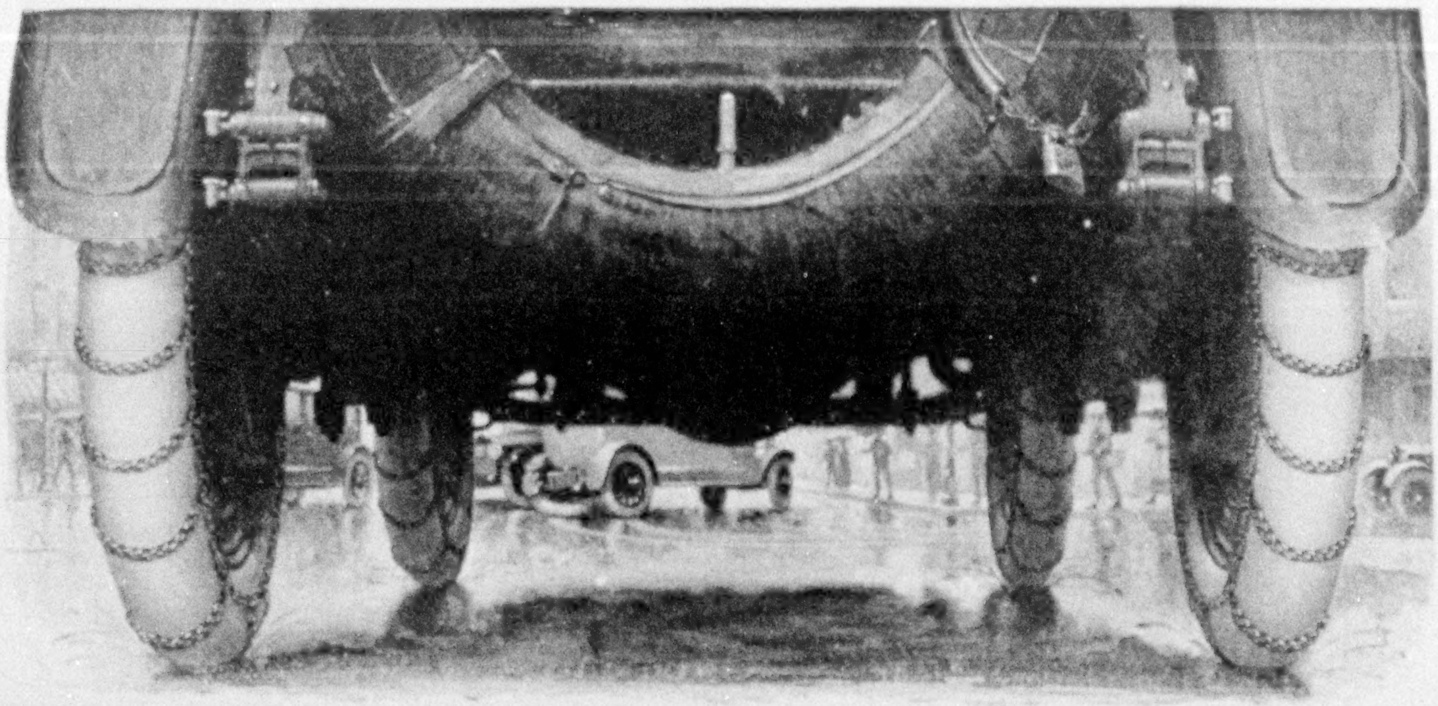
DULUTH
FARGO
WATERTOWN
ABERDEEN
GREAT FALLS
BILLINGS
SPOKANE
SEATTLE
TACOMA
PORTLAND
POCATELLO
SALT LAKE CITY
OGDEN
SACRAMENTO
OAKLAND
SAN FRANCISCO
LOS ANGELES

We are manufacturers of about 20,000 articles, including valves, pipe fittings and steam specialties, made of brass, iron, ferrosteel, cast steel and forged steel, in all sizes, for all pressures and all purposes and are distributors of pipe, heating and plumbing materials.



Dependable Protection for Pedestrians and Car Owners

Weed Tire Chains

It seems unfair that a few careless owners and drivers who do not use Weed Tire Chains should imperil pedestrians and others who use this reasonable precaution to prevent skidding accidents.

When an automobile skids on a crowded thoroughfare it is more of a danger to other vehicles and persons than to itself and its occupants.

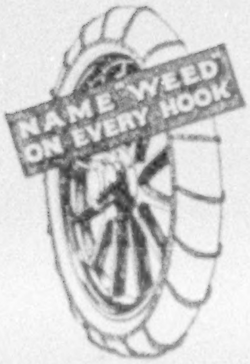
There is nothing so maddening or so nerve racking as to have another motorist skid into you imperiling the lives of your passengers and smashing your car, especially when you know *it could have been prevented* by the use of Weed Tire Chains.

Some of the larger cities are greatly agitated over the skidding menace and committees have been formed *to draft stringent ordinances* for the protection of pedestrians and road users.

It is high time that careful, sane motorists adopt some means to protect themselves and pedestrians and prevent the awful loss of life and property caused by skidding.

The courts should not regard skidding as an unavoidable accident when Weed Tire Chains, *the proven device for preventing it,* are so easily available and at so reasonable a price.

See that you do not lay *yourself* open to severe criticism. Always put on *your* Weed Tire Chains when the roads are slippery and uncertain.



American Chain Company, Inc.

BRIDGEPORT CONNECTICUT

In Canada: Dominion Chain Company, Ltd., Niagara Falls, Ont.

Largest Chain Manufacturers in the World

The Complete Chain Line—All Types, All Sizes, All Finishes—From Plumbers' Safety Chain to Ships' Anchor Chain

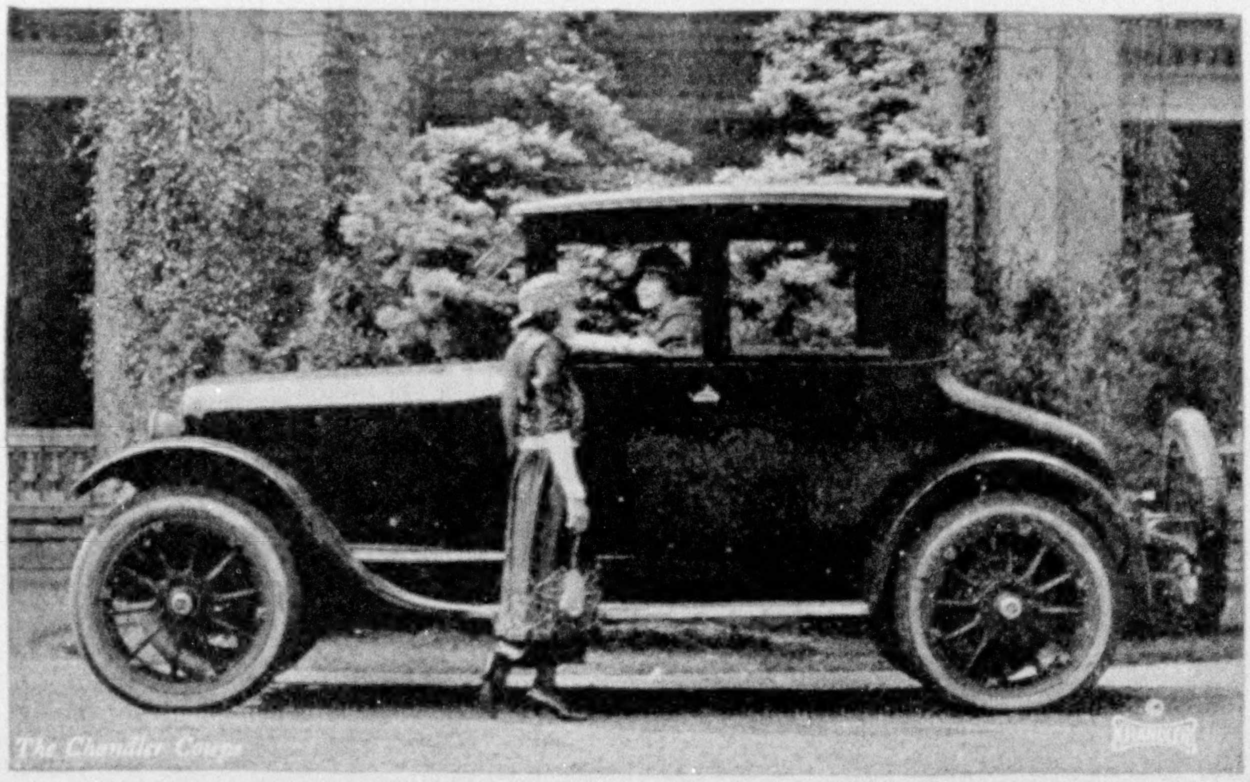
GENERAL SALES OFFICE: Grand Central Terminal, New York City

DISTRICT SALES OFFICES:

Boston Chicago Philadelphia Pittsburg Portland, Ore. San Francisco

CHANDLER SIX

Famous For Its Marvelous Motor



Leadership Established By Superior Service

THE Chandler is a handsome car of distinguished gracefulness in each of its several types of body, but Chandler leadership is founded on the excellence of the chassis underneath.

The Chandler has earned its position of leadership among sixes by the superiority of service to its host of owners.

A really marvelous motor, a wide range of flexible power, masterly endurance, and staunch construction throughout, have made the Chandler the first choice car.

Thousands who have sought the certainty of service, the desired performance under all conditions and genuine satisfaction, have found these qualities in the Chandler.

The Most Fairly Priced Fine Car

SIX SPLENDID BODY TYPES

Seven-Passenger Touring Car, $2095 Four-Passenger Roadster, $2095
Four-Passenger Dispatch Car, $2175
Seven-Passenger Sedan, $3195 Four-Passenger Coupe $3095 Limousine, $3595
(All prices f. o. b. Cleveland)
There are Chandler dealers in more than a thousand towns and cities

THE CHANDLER MOTOR CAR COMPANY
CLEVELAND, OHIO

Export Department: 5 Columbus Circle, New York Cable Address: "CHANMOTOR"

Studebaker

BIG-SIX

BECAUSE Studebaker manufactures completely in its own factories its bodies, axles, motors, transmissions, steering gears, springs, tops, fenders, and cuts its own gears and other vital parts, middlemen's profits are eliminated.

With such unequalled manufacturing advantages and large quantity production, Studebaker is able to offer cars of sterling high quality at prices that make them the most exceptional values on the market.

60-H. P. detachable-head motor; 126-inch wheelbase, insuring ample room for seven adults.

All Studebaker Cars are equipped with Cord Tires—another Studebaker precedent.

LIGHT-SIX

Touring Car . $1485
Landau-Roadster 1850
Sedan . . . 2450
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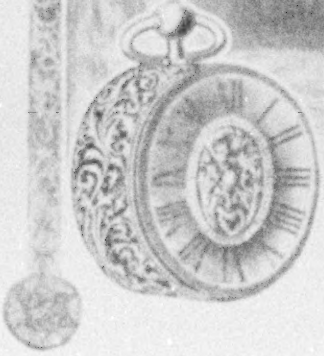
The First Watch



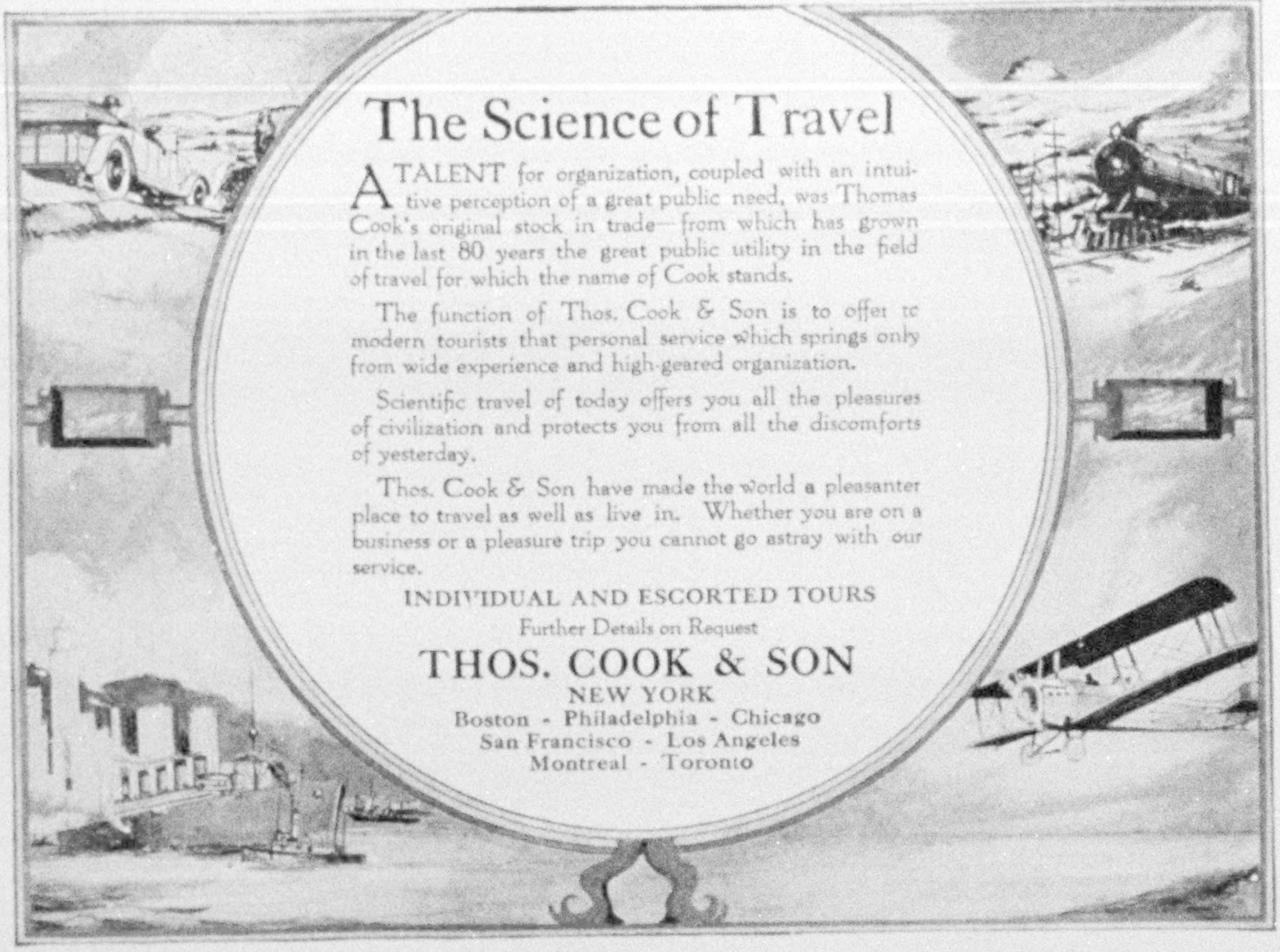
FROM Table-Clock to Pocket-Clock, or "Watch"—this was a short step mechanically, but a tremendous stride in practical utility.

Like many another child of genius, the First Watch was born of adversity. In 1504 Peter Henlein, a young locksmith of Nuremberg, in Franconia, was involved in a scuffle which cost the life of an elder locksmith. Seeking sanctuary with the Barefooted Friars, he buried himself in his chosen work—and the following year presented his benefactors with the world's First Watch.

Popular tradition confuses this timepiece with the "Nuremberg Egg" of half a century later, but Henlein's masterpieces were drum-shaped. Built of iron, they were clumsy, heavy, as large as saucers. As the crude spring unwound they lost momentum, varying an hour a day. Their cost was the equivalent of $1,500 in our currency—the watchmaker's output was one a year! First carried by night-watchmen, these playthings of the rich soon became known as "watches"—the direct ancestors of those time-keeping marvels of our day—

Material, construction, adjustments and service fully covered by Elgin Guarantee * * * *

Elgin Watches



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.............................192

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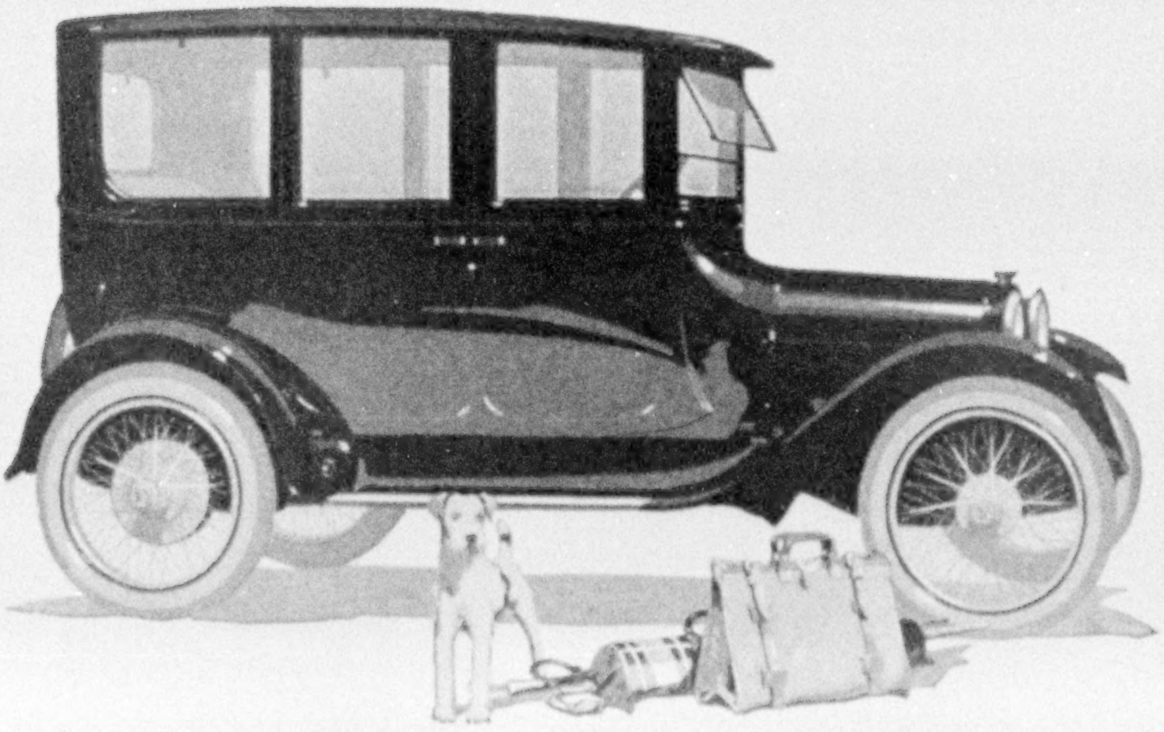

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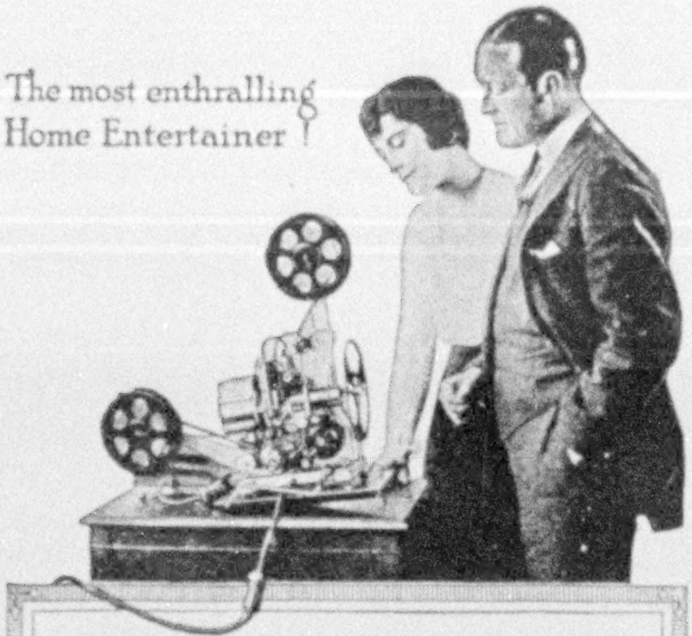

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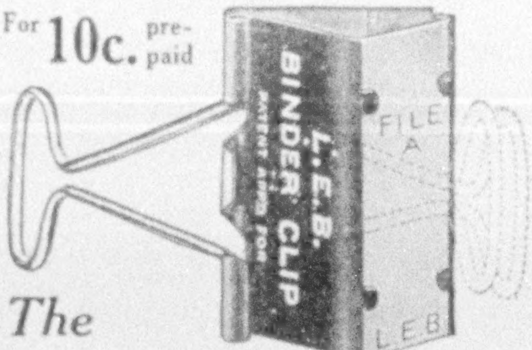

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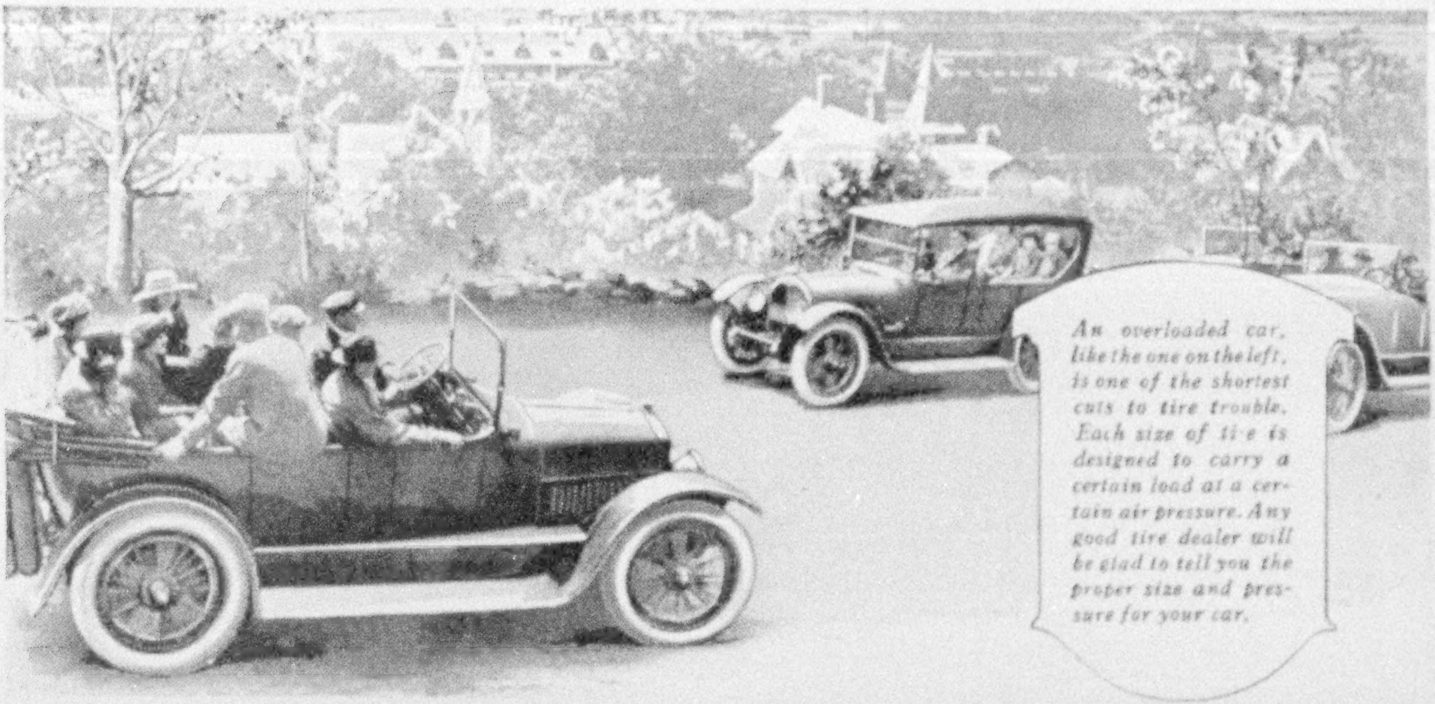

Tire Knowledge is Spreading Faster than Some People seem to Think

NOTHING is surer than this—that the man who bets against the informed opinion of the tire users of this country is going to *lose.*

The average American motorist is essentially practical. He may get off the track now and then.

But always you will find him going right in the end.

* * *

The trouble with the irresponsible type of tire dealer is that he allows his ideas of his customers to be bred in an atmosphere of distrust and fostered by a small coterie, not at all representative of the motoring public.

Not every motorist of whom he takes advantage always finds it out immediately.

But the time it takes for motorists generally to complete their tire education *is growing less and less every season.*

* * *

The United States Rubber Company has always stood for a *wider spread of tire knowledge* among motorists.

Doing everything it could to encourage them to greater *care* in *tire selection.*

Firm in the belief that the more they know about tires, the *quicker* they will come to *quality.*

* * *

Back of the *legitimate dealer* who sells *legitimate tires* stand all the weight and influence and responsibility of the United States Rubber Company—the *largest* and *most experienced* organization of its kind in the world.

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This visualizing geography was designed for schools—that children of all ages might "see" real brothers and sisters and "far-away" lands as they always do Ali Baba and the Land of Make-Believe.

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10-20

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For each illustration there are 200 words of large print text. Thus, with the "Eskimo-Sahara" set, 48 children **at one time** can go adventuring on Admiral Peary's trails, living and playing with these Far North folk, or resting in wondrous oases after camel journeys.

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"What *can* I do, then?" Who has not heard that pouting plea? On rainy days at home the pictures stimulate story-telling. Games will be invented with the separate sheets. The simple yet fascinating text will arouse the child's interest in reading for itself.

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Give out 22 of these 288 sheets each week and you have a book that stays new through three whole months.

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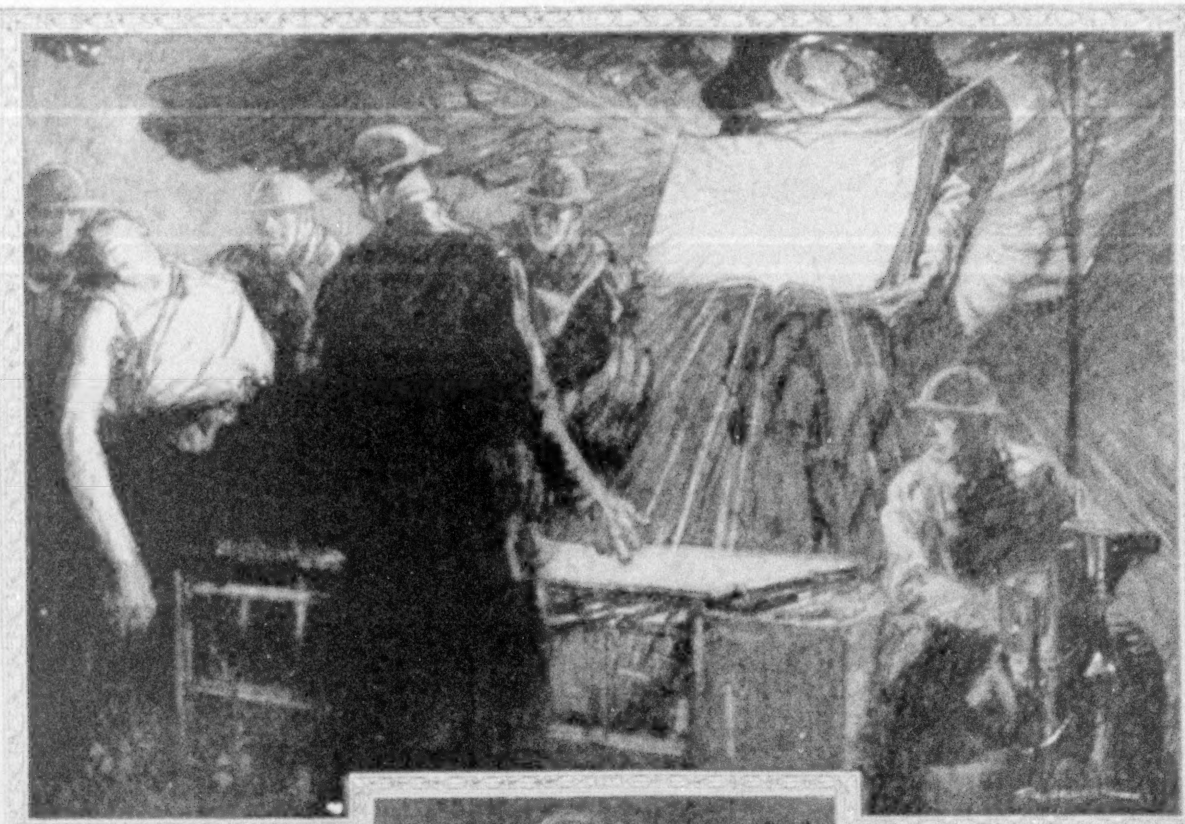
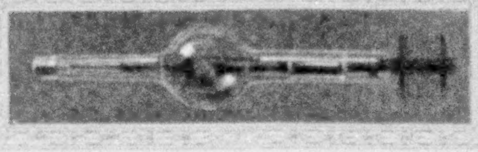
Pictorial Geography will make each of these extra tutoring hours a veritable "happy hour."

As Birthday and Xmas Gifts

These sets make ideal birthday or Christmas gifts for children up to high-school age. Make a note on your calendar. Present a set to your child's teacher. *By the way, have you met her?*





When Minutes Meant Lives

FROM our Army in France came a call for a light and mobile X-ray outfit. Those we had, and those the Allies had, were heavy, complicated and fragile. It would mean life to American soldiers if their wounds could be examined immediately, on the field, instead of in the hospitals to the rear.

The problem was given to the Research Laboratories of the General Electric Company, and the facilities of MAZDA Service, which include the knowledge and experience and technical skill of scientists and engineers, quickly developed the X-ray outfit needed. Incorporated in it was an X-ray tube of new and improved design, by virtue of which cumbersome auxiliary apparatus was eliminated.

The engineering skill of allied industry, of Army officers, and of roentgenologists was called upon to complete the outfit, and in an astonishingly short time these units, truly portable, were being shipped to France. The new X-ray outfit did work with one tube for which other machines required a variety of tubes. Further, it weighed less than half as much, and was three times as powerful as the best field equipment then available. This outfit was made standard by the United States Army, it was used in the fields, and it replaced more intricate apparatus in many of the base hospitals.

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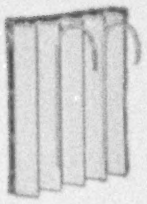

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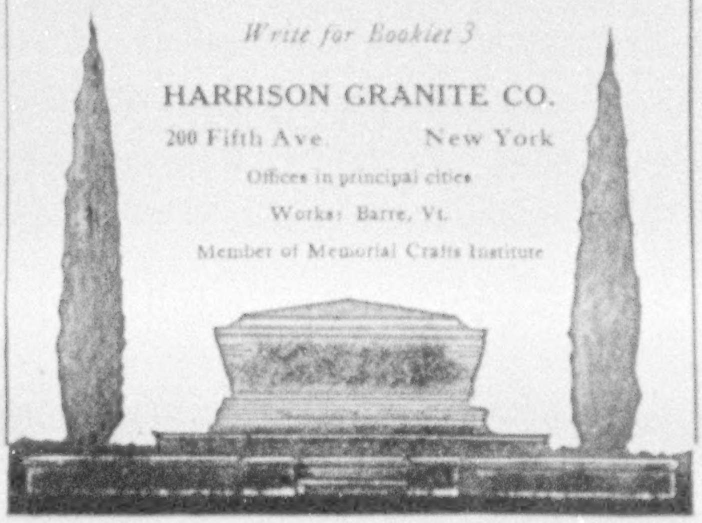

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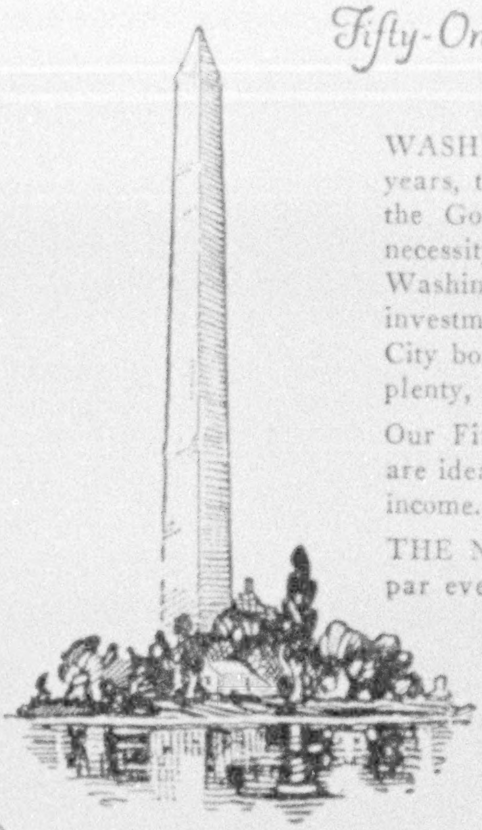

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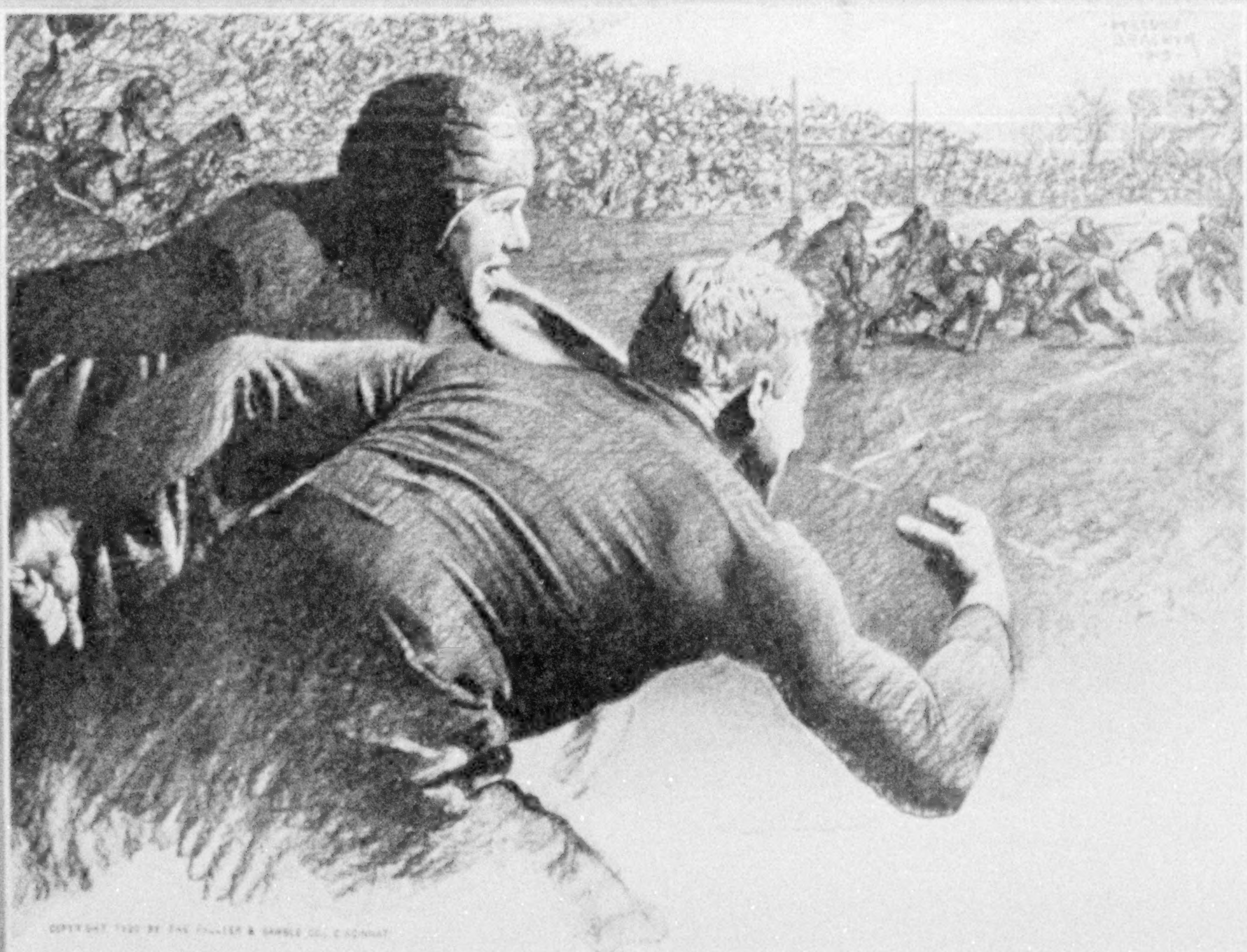

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NEPAL: A LITTLE-KNOWN KINGDOM

By John Claude White

Author of "Lhasa, the World's Strangest Capital," "Castles in the Air," and "Unknown Bhutan"

With Photographs by the Author

AMONG the Himalayan Mountains, of which it owns a fair portion, including Mount Everest, the highest mountain in the world, is the Kingdom of Nepal. Often heard of, it is one of the native Asian States of which least is known.

With the exception of the British Resident and a few European officials who live in the Residency grounds at Khatmandu, the capital, no one is allowed to visit the country without a special permit issued by the Durbar. When the pass or permit has been obtained, visitors are obliged to travel by one particular route and are not allowed to go beyond the Valley of Khatmandu, a tract of country about 15 miles wide by 20 miles long, surrounded by high mountains.

The road into Nepal for its entire length is purposely kept in a bad state of repair by the Durbar and runs over quite unnecessarily difficult country, the idea being that the worse the road the more difficult it would be for attacking troops to enter the country. On one occasion, when coming up from the plains, I returned to Khatmandu by a fairly good road, turning off near Chitlong and entering the valley close to Patan. The Gurkha "escort," which always accompanies Europeans on any journey in Nepal, had temporarily left me, and, seeing the road, I rode in quite easily before the escort discovered I had left Chitlong.

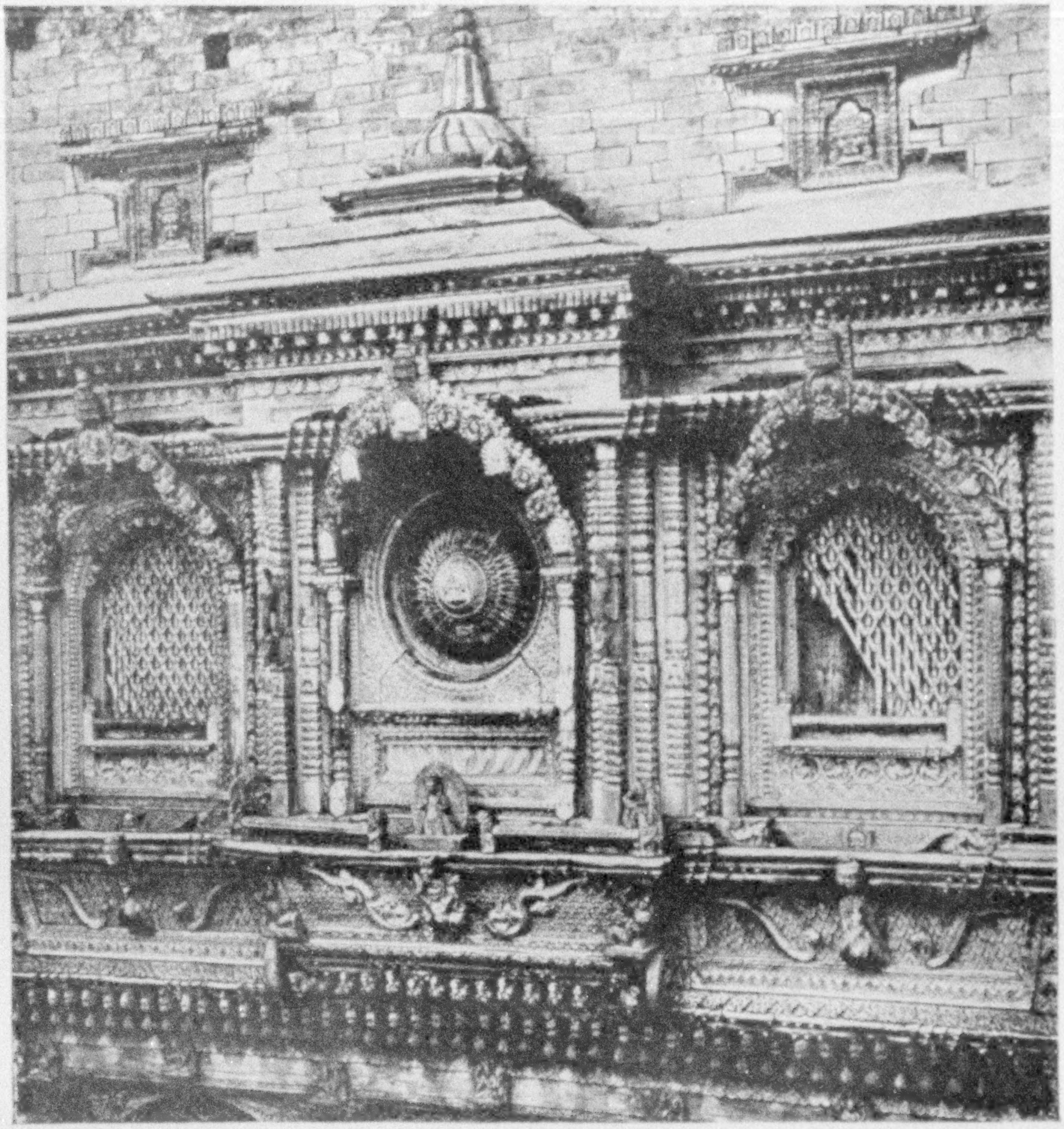
So I found that there was this much good road, at any rate, and I believe there is a good road all the way to the plains of India down the valley of the Baghmutti, but no Europeans are allowed to travel on it.

A TURBULENT, ACTIVE, PROLIFIC PEOPLE

The Nepalese are a prolific people of very great energy and activity, eager to make the most of any opportunity which offers itself. The population is increasing so fast that outlets have to be found, and the trend of emigration now is to follow the foothills along Bhutan and into Assam.

They make good settlers, though somewhat turbulent, bring their manners and customs and religion with them, and do not intermarry with the people of the countries in which they settle. They require a very firm hand to keep them in order in the lands of their adoption. It is quite within the bounds of possibility that, in the near future, from sheer force of numbers, they will become the dominating race in Bhutan, the Bhutanese being few in number and a race which apparently is on the wane.

The Nepalese are a fighting people, have an excellent army and organization, and are fond of show, both in military display and in their religious festivals. The latter are very numerous and in fact seem to be interminable. The women take a prominent part in most of them.



WONDERFUL CARVED WINDOW IN TEMPLE OF SWAYAMBU HILL, WHERE THE EYE ALMOST TIRES OF THE INTRICATE DESIGN

To the casual observer Newar architecture often may seem over-elaborate, tedious, needlessly ornate. To the student it is as expressive of this oldest Nepal civilization as a Roman arch or a Greek temple. Every iota of the complicated design has a meaning—generally a religious significance. Its very intricacy is expressive of a people of many races, whose tongues today are as those of ancient Babel.

Some of the semi-military pageants end in the massacre of hundreds of buffaloes and indescribable scenes of blood and dead animals. In one such ceremony, known as the blessing of the colors, the commander-in-chief dips his hands in a bowl of blood and clasps each banner in turn, thus imprinting on each the mark of bloody hands. The scene is somewhat revolting, but probably has its use in keeping up a martial spirit in the army.

Other processions are very picturesque, flowers, flags, and banners playing a prominent part.

FEMININE FASHIONS IN NEPAL

The Nepalese women wear yards upon yards—sometimes as many as a hundred—of fine muslin plaited to form a huge fan-shaped bunch in front, the back being quite tight. When a lady of rank drives in her barouche she completely

fills the carriage with her voluminous skirt of brilliant hue. Above the skirt a vivid little tight-fitting jacket, usually of velvet, is worn; the hair is dressed in a peculiar knot in front, above the forehead, and fastened to one side by an enormous gold plaque with a jeweled center. A heavy gold necklace and gold bangles complete her jewelry. Every imaginable shade is used—purple, pale blue, green, carmine, orange, white, yellow, turquoise, and deep red—and the effect is wonderful.

At the time of state ceremonies the streets are filled with processions of elephants in gorgeous trappings, horses and ponies, brilliant military uniforms, and the usual crowd of good-natured, pleasure-loving people, the whole against the background of the old temples and natural surroundings making a wonderful spectacle.

A YEAR SPENT IN NEPAL

I spent a year in Nepal, where I was sent officially, and have seen the lovely valley in its many changing aspects at different seasons—pale green with growing rice, golden at harvest time, white with blossom in the spring, and brown and bare in the short winter months, but always beautiful. My stay also enabled me to become acquainted to some extent with the manners and customs of the people.

The journey into Nepal is not an easy one, and at the time of my visit the railway only ran as far as Segowlie, whence the journey of sixteen miles to Raxoul was continued in a carriage lent by a hospitable planter at whose house the night was spent.

Here the difficulties began, and the journey as far as Hetowrah, through the Terai and outer hills, was accomplished on horseback or in a palanquin carried by bearers.

At first there is a track through the forest, but as soon as the outer hills are reached the road loses itself in the bed of a stream, up which the bearers pick their way with difficulty over and among great boulders.

At Hetowrah the Rapti River is reached, a pretty mountain stream, and we changed from horses and palanquins to sturdy little hill ponies and dandis, a sort of chair carried by hillmen. From there onward the road or, rather, track passes through lovely scenery and through the villages of Bichiakoh, Nimbuatar to Bimphidi, where there are some magnificent cotton trees, covered in the spring with large, brilliant red flowers, and on over the Sisagarhi Pass to Marku and Chitlong, prosperous little villages, whose inhabitants take their produce to Khatmandu on market days, thinking nothing of the long tramp there and back of over forty miles.

WHERE "BAD ROADS" IS A NATIONAL DOCTRINE

The official road then goes over the very rough track across the Chandragiri Pass and down the almost impassable road on the other side into the Nepal Valley. The last portion of the descent is down a long staircase of roughly placed blocks of stone, and it is marvelous how the laden men and ponies keep their footing on it.

From Chandragiri Pass there is a beautiful view down into the valley, studded with numerous towns and villages and surrounded on all sides by mountains, while to the north tower the everlasting snowy peaks of Gosainthan and Dayabung.

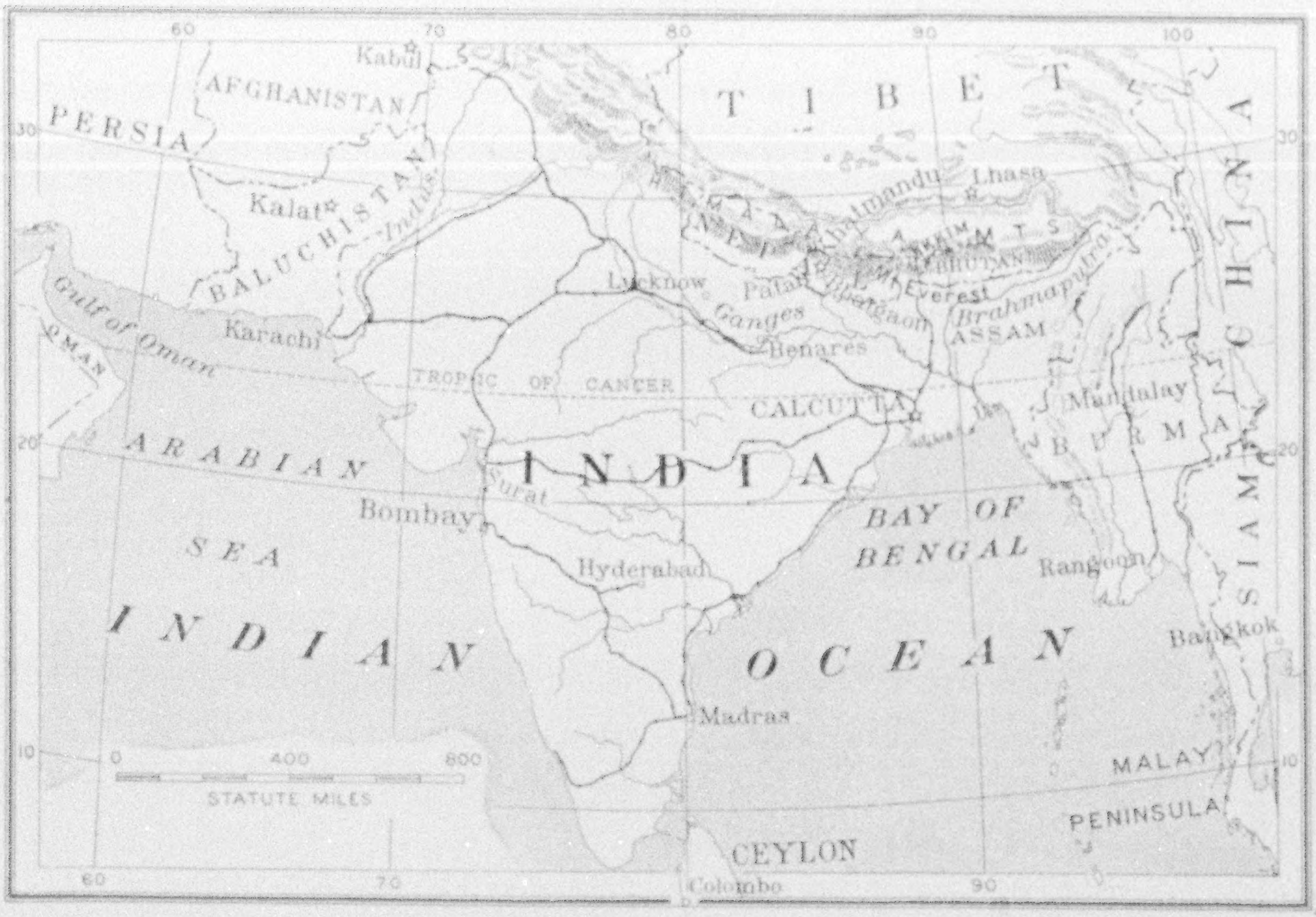
From the foot of the pass an excellent carriage road into the town of Khatmandu runs through the valley teeming with people, towns, palaces, temples, and innumerable shrines. There are miles of such good carriage roads within the valley, mostly constructed in Jung Bahadur's time, and carriages and pairs and occasionally a four-in-hand are constantly used by the palace people.

In this valley, where the shrines alone are said to number more than 2,700, the buildings present an amazing diversity of form, derived from many sources—Egyptian, as shown in the typical form of the windows and doorways finely adapted to local traditions; Persian, Babylonian, Indo-Aryan, and even Nestorian in some of the designs.

It is necessary, before describing any of these, however, to give some account of the religion of this people in order to show its intimate connection with the artistic treatment of the temples, shrines, and even private buildings.

IMAGE OF THE GODDESS KALI IN THE KHATMANDU MARKET-PLACE

A procession of women to honor this image is a feature of the ten-day festival known as the Durga Puja. While the men are engaged in military maneuvers, the women march in what might be mistaken for a visiting firemen's parade to the square, headed by a representative from the royal household, walking under a huge red umbrella. The costumes are bizarre, vivid in coloring, tinsel-bedecked, and the women's faces are liberally daubed with vermilion



Drawn by A. H. Bumstead

MAP SHOWING THE GEOGRAPHICAL RELATION OF NEPAL TO INDIA, BURMA, AND TIBET

The kingdom of Nepal has an area comparable to the combined areas of New York and Connecticut.

The inhabitants of Nepal are collectively known as "Paharias," or "Dwellers in the Hills," and are divided into innumerable castes, of which the principal among the Gurkhas, now the dominant race, are as follows in the order of social precedence:

The following are known as high caste:

1. Brahmans, who eat rice cooked only by members of their own caste. They drink water from the hands of members of castes Nos. 2 to 19.

2. Surmgasi, who eat rice cooked by Brahmans, Thakuris, and Khas only. They drink water from the hands of all castes up to No. 19.

3. Thakuri, who eat rice cooked by Brahmans only. They drink water from hands of all members of all castes up to 19.

4. Khas or Chitsi, who eat rice cooked by Brahmans and Thakuris only and drink water from hands of all members of castes Nos. 2 to 19.

The intermediate castes run from 5 to 19, inclusive, and the lower castes from 20 to 24, inclusive.

The five castes from 20 to 24 do not have Brahmans as priests. Their priests are members of their own castes. They have no dealings of any kind with castes 1 to 20. They must leave the road on the approach of a member of castes Nos. 1 to 19 and call out to give warning of their approach. They may not enter the courtyards of temples.

The Bantor, Danuar, and Drai tribes belong to the plains, and no one knows how to classify them in respect to social precedence.

RECRUITING FOR ARMY IS RESTRICTED TO CERTAIN CLASSES

Recruiting for the British and Nepalese armies is carried on only from certain of these castes. In addition to these, there are among the Newars, or conquered people, 41 castes and subcastes.

Then all trades are subdivided into castes—masons, carpenters, potters, etc.

It can be imagined that, with such a

STEPS WITH CARVED FIGURES OF MEN AND ANIMALS, LEADING TO AN ELABORATELY CARVED HOUSE IN BHATGAON

As nature abhors a vacuum, so the Nepalese seem to avoid a smooth surface. Even steps are relieved by carved figures. They excel in wood and metal-work; their stone carving is apt to be more crude. Despite this profusion of decoration, their architecture does not suggest the "gingerbread" type, but rather the delicate intricacy of a Belgian cathedral.

medley of castes, the placing of the people by any outsider is almost, if not quite, an impossibility, and these Hill people are far more strict in their caste rules than any of their so-called coreligionists (Hindus) in the plains. I say "so-called" advisedly, for though the bulk of the people profess the Brahman or Hindu religion, so many of the older forms of Tantric worship and of Buddhism have been retained and have so great a hold on their imagination that it would now be more correct to call them Brahmo-Buddhists.

ANCIENT TANTRIC RITES SHOW IN CARVINGS

With a large substratum of Tantric rites appearing in many of their forms and ceremonies, the same influence is found in the carvings in the temples, some of which are gross, and even immoral, although only in a few instances is this very apparent.

So, to look with understanding at the varied and beautiful buildings, it must be remembered that the workers have derived their inspiration from a large number of sources and have adapted their ideas to their immediate surroundings with marvelous effect.

In the structural features of their architecture and its ornamentation, in their sacred utensils, arms and armor, in their household implements, vestments, jewelry, everything, there is a similarity and special form which runs through all these eastern Himalayan States. The opinion of Sir George Birdwood, the great authority on such matters, is as follows concerning the source:

"It is a matter of some conjecture where this civilization springs from. . . . The traditions of the yellow, or Turanian, races of central Asia point to the west as the place of their genesis, as those of the white, or Aryan, races of Europe, Persia, and India point to the east, the common center from whence all these races took their exodus eastward and westward being somewhere round about the Caspian and Black seas.

"Chinese tradition names Tibet as the cradle of the race, which remained there for some centuries before moving into China. It thus comes that Chinese art has an Accadian source, and the stream of commerce, which has from the remotest antiquity crossed Asia from the Mediterranean to the Yellow Sea, has modified this by its inclusion with that of the Hamites, Greeks, and even Nestorians and that of Cathay.

"Egyptian art, which is to be traced throughout the whole of Turanian Asia, has thus penetrated into the remotest recesses of the Himalayas, and has helped to mold the buildings, both of brick and stone, the regal residences and strongholds, the houses and domestic arts of these remote and shut-in States in the heart of the Himalayas."

In some ways the arts of these States resemble very closely those of southern India, and this may be accounted for by the fact that they both escaped the Mohammedan invasion. They have retained unbroken to this day their arts as produced before the Mogul conquests of northern India. Tradition has added many a touch of local character born of people living amid lovely surroundings and having an artistic temperament as well as a religion which to them is still a living one, the incidents of which they love to depict magnificently.

AN INGENIOUS METHOD OF FORTIFICATION

The most striking buildings of Nepal's comparatively modern capital, Khatmandu, are, perhaps, those composing the Durbar Palace, with its many quadrangles and pagoda-shaped roofs, full of chambers and courts with small communicating doors easily closed, which enable the inhabitants to defend themselves in case of political disturbances, which are not infrequent. Some of the windows are very fine and there are some striking bits of wood-carving.

The Royal Temple of the Goddess Taleju, the protectress of the ruling family of Nepal, is the finest in the Durbar group and is kept exclusively for the use of the royal family.

Bim Sens Tower, a building nearly 200 feet in height, stands out above the other buildings in the city. It is merely a tower, with no particular meaning, although the Nepalese have a legend that the great Jung Bahadur leaped on horseback from the top and was uninjured.

RANI OF NEPAL AND HER LADIES-IN-WAITING

The Hungarian peasant woman requires two dozen or so petticoats for a gala occasion; a belle of Nepal demands balloon-like trousers containing as many yards of material. The women have large brown eyes, and their blackening of the lids adds a suggestion of languor. A tight-fitting, bright-colored jacket is worn above the voluminous trousers. The hair is parted in the back and done in two plaits which hang down in front.

CHINESE EMBASSY AT KHATMANDU: NEPAL, INDIA

Clamped between India and Tibet, it was inevitable that Nepal should clash with them, but surprising that after her disagreements with both she should have maintained a record of amity with two civilizations as different from hers as they are from each other. The Nepalese sought to invade Tibet in 1790, but were driven back to their own borders.

VIEW OF RADHA KRISHNA TEMPLE

Nepal architecture, while distinctive, abounds in traces of earlier civilizations, and its composite sources are being studied by ethnologists (see page 251); but the layman might guess at two recognized influences—that of Egypt in the pyramid-like outlines of such temples as this, and the Chinese origin of the pagoda-like examples, such as the Changu-Narain (see page 258). Tall posts, which suggest totem poles, surmounted by human or animal figures, are generally to be found in the vicinity of shrines and temples.

The modern palaces, although containing valuable collections of various objects of art, are of very little interest externally, with no architectural features of note. It seems a pity that they should have been so built amid the surrounding wealth of picturesque buildings.

The old buildings are built of fine red brick with hair joints, leaving no mortar visible, and the ornamentation is generally of molded bricks of the same red color, although sometimes a terra-cotta tone is used. "Sal," which turns almost black from weathering, is used for woodwork. The roofs are of red corrugated tiles set in mud, with elaborate, grotesque finials. The combination of red brickwork, toned down and weathered by age to a delightful color, with the dark wood used for the overhanging windows and doorways,

SOME OF THE ALTAR UTENSILS FROM THE TALUNG MONASTERY: SIKKIM

Note the thigh-bone trumpet with a "Dorji" carved on it.

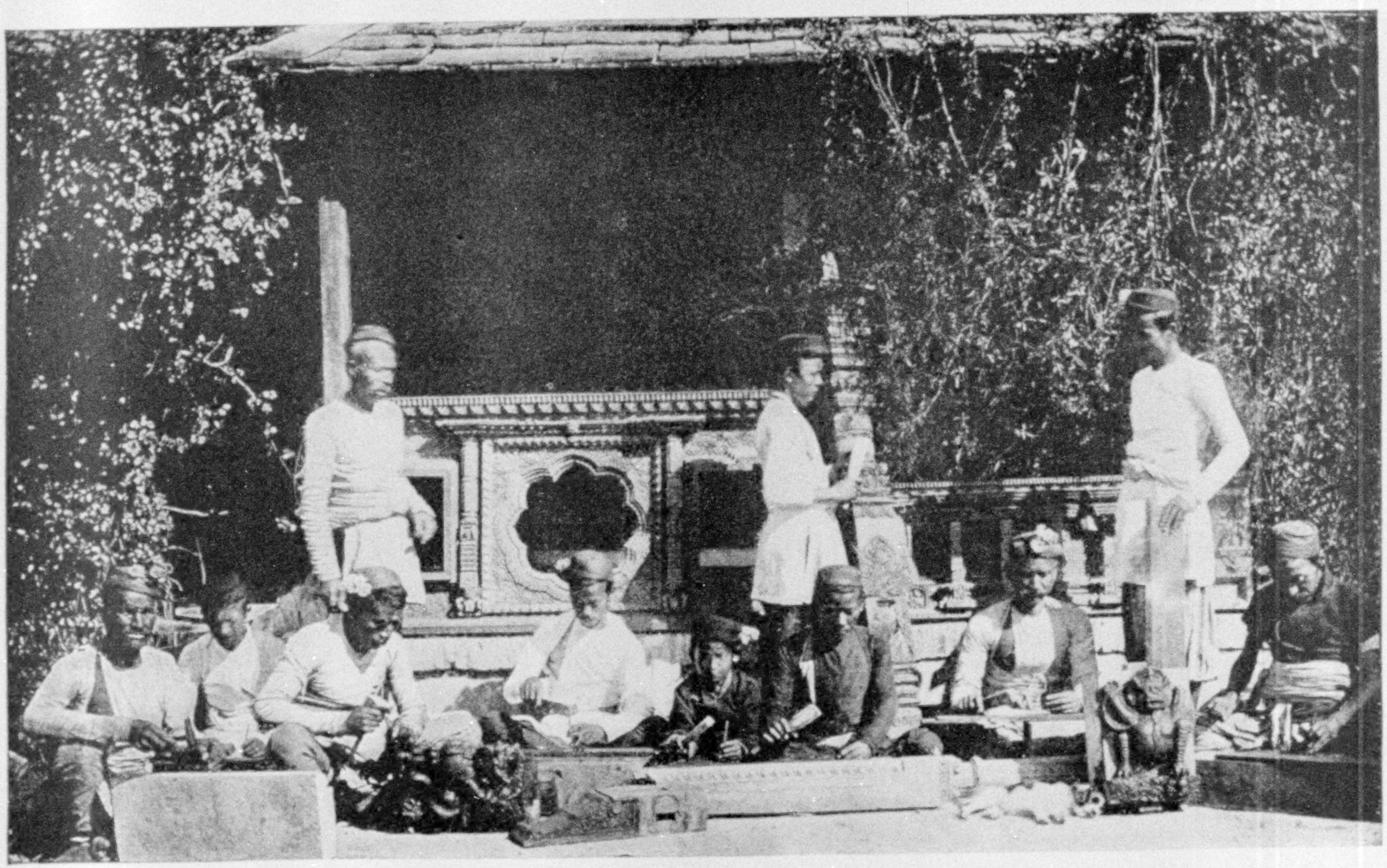
produces a most picturesque effect, relieved from monotony or sombreness here and there with some brilliant coloring and the sparkle and glitter of the brass and copper repoussé work with which most of the doorways are ornamented.

BHATGAON, A CITY OF ARCHITECTURAL JEWELS

Bhatgaon, one of the oldest Newar capitals, lies about seven miles southeast of Khatmandu, and, with its numerous temples, shrines, and statues, all of the greatest architectural value, it is even more interesting than the capital.

Through winding, crowded, dirty streets, with wooden colonnades overhung by the balconies of old houses, one reaches the central square, on all sides of which buildings have been erected with the most picturesque irregularity, the finest among them being the Durbar Hall, with its magnificent doorway of brick and embossed copper gilt, built in the reign of Bhupatindra Mall. This doorway is one of the finest pieces of work in Nepal and on it is depicted the whole symbolism of the Hindu and Buddhist religions.

Facing the doorway is the statue of Raja Bhupatindra Mall, an extremely

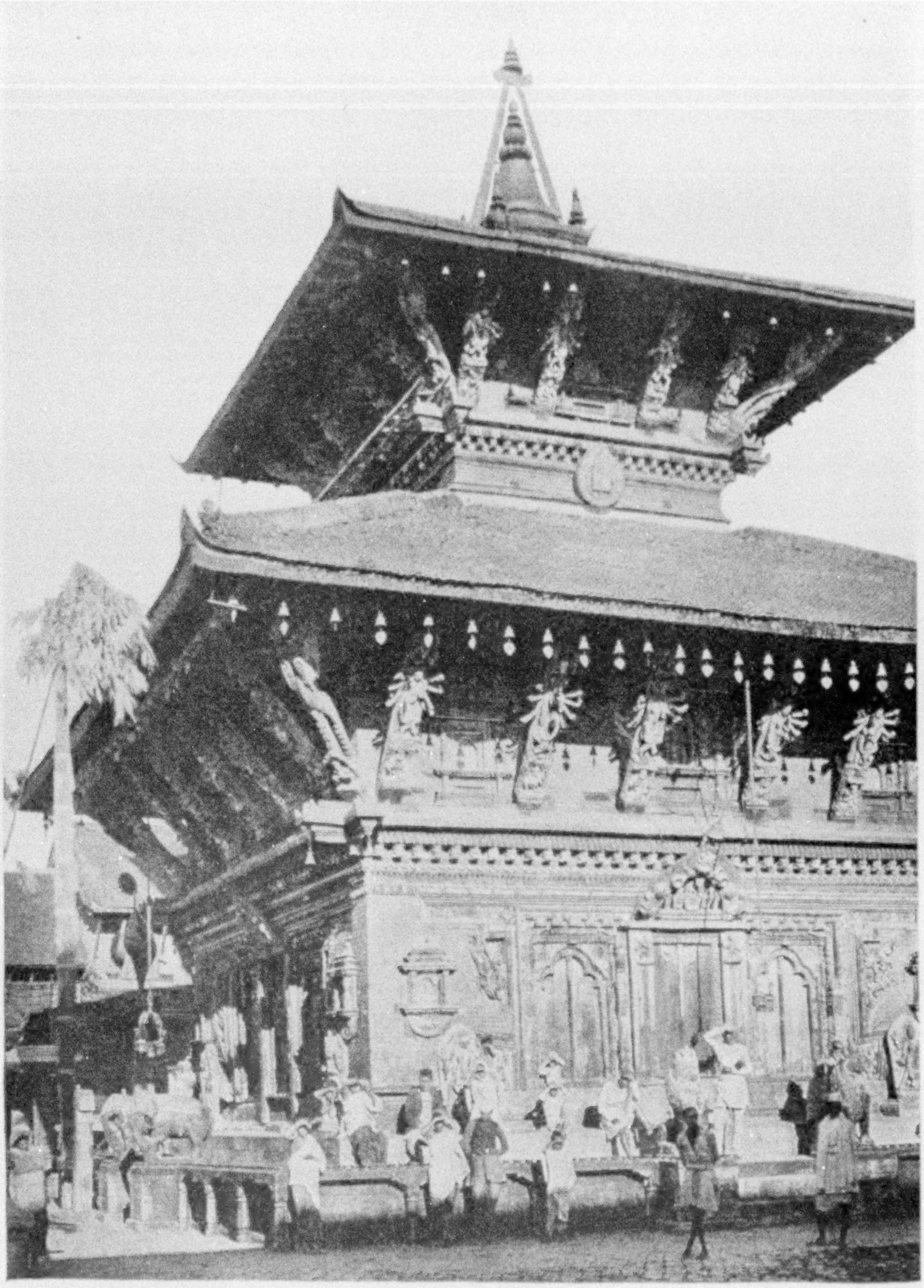


GROUP OF NEPALESE CARVERS

The Nepal wood-carver applies his art principally to the adornment of every available scrap of wood in buildings. If there is room, he usually employs a mythological character as the center of his design. The wood he prefers is "sal," a variety which turns black with weathering.

BATHERS IN THE SACRED RIVER

Grim at times is the Baghmutti, with the groans of the dying, brought many miles for their final penance, and lit with the funeral pyres of the dead, who are cremated on its banks. But the usual morning scene is more suggestive of a gay watering place; for here the swarthy men and the olive-skinned women, dressed in bright colors and wearing flowers in their hair, come to bathe—a ceremony that has both a religious and a sanitary motive.



A VIEW OF THE VISHNU TEMPLE OF CHANGU-NARAIN

By a swing around nearly fifty miles in the vicinity of Khatmandu the pious pilgrim may visit the four shrines of Narain. The Changu shrine is the most frequented. Climbing the seemingly endless stairs is an essential part of the tribute to this deity, but the worshiper must be careful to avoid one step, which bears the sacred emblem of The Eye. Note the leaning figures beneath projecting eaves of the roof. By these the Nepal architect seeks to avoid a top-heavy effect which otherwise might result from the massive coverings he uses.

well executed figure in bronze, seated on a boldly designed pedestal of stone on a square pillar about 20 feet in height, with the royal umbrella rising above the figure.

Close by is the Ujatpola Deval, or Temple of Five Hagis, which stands on five platforms up which a flight of steps leads to the entrance. This stairway is guarded by five enormous pairs of figures carved in stone, the lowest pair being two giant wrestlers; above them two elephants ten times as strong as the men; above two lions ten times as strong as the elephants; next, two dragons ten times as strong as the lions, and finally two deities, most powerful of all.

In this square is also the Taumari Tol, dedicated to the Goddess Bhawani. The shrine in front has two magnificent brass dragons, one on each side, decorated with great splashes of vermilion. The brickwork is covered with brass plates deeply embossed, and on each side, on a lotus pillar, is a copper gilt lion holding a banner. This building has quaint and grotesque moldings painted in most vivid colors and lattice windows made of strips of gilt metal, the whole presenting a kaleidoscopic effect in the brilliant sunshine.

NEPAL'S LARGEST CITY A SLEEPY PLACE

Patan was the old Newar capital, where Buddhism was the accepted religion of the country before the invasion of the Gurkhas. Although the largest town in Nepal, it is a quiet, sleepy place, much of it falling into ruins, but still most picturesque. It stands in the center of the beautiful valley, against a background of green mountains and snowy peaks—a network of narrow, twisting little streets packed full of shrines, temples, and pagodas, many of them deserted and falling into ruins, but still with exquisite bits of carving and wonderful doorways of all shapes and sizes and wonderful designs.

Many of Patan's buildings are decorated with sheets of embossed copper gilt and everywhere the shrines are guarded by pairs of fearsome animals of enormous size. Carved stone pillars are surmounted by animals, birds, or fish modeled in metal; bells of all sizes are everywhere, and huge lotus thrones in bronze hold bronze Thunder Bolts, or Dorgis.

Kirtipur and Niakot are smaller cities, which, despite the evidences of decay on every hand, are full of beautiful and interesting buildings and shrines.

THE HOLY CENTER OF NEPAL

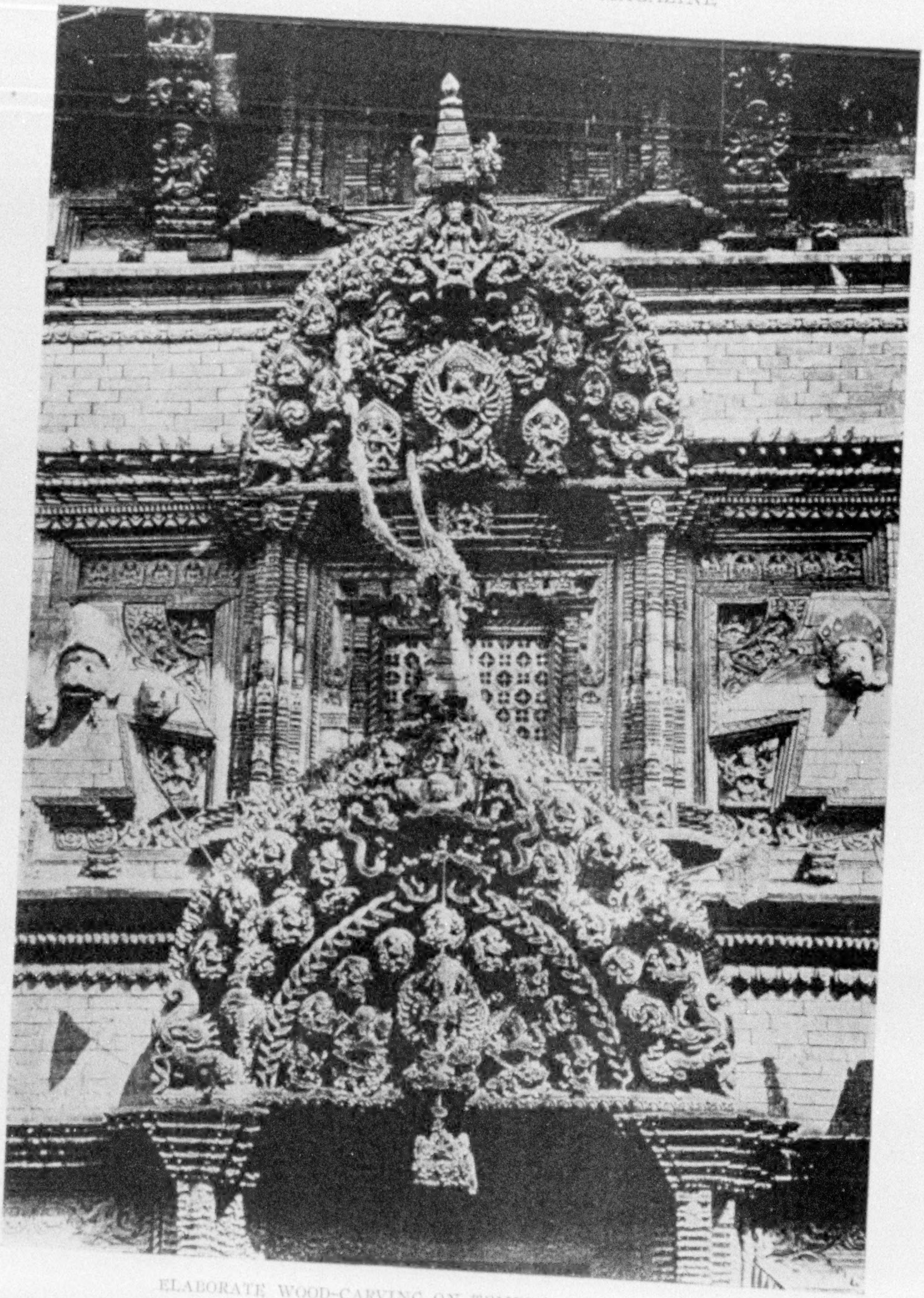
Pashpati is the holy center of Nepal, to which tens of thousands of pilgrims flock during the few days, once a year, when the country is thrown open. The roads are then one long, unending crowd of men and women, old and young, chanting as they go, "Pashpati nath ke-Jai." Its shrines and temples are clustered on the banks of the holy Baghmutti River, and there the dying are brought to end their days. To these Hindu it is a place as holy as is Benares to the plains men, and to die there, with the sacred water lapping their feet, means passing to everlasting peace.

The town is most picturesquely situated, the stream issuing from a narrow, beautifully wooded gorge and the golden roofs of the pagodas among the fresh greenery forming a lovely picture, enlivened throughout the morning hours by the constant stream of brilliantly dressed men and women coming to perform their religious ablutions before entering upon the day's work.

The Temple of Changu-Narain is situated on a spur of a mountain about eight miles to the east of Khatmandu and is reached by a winding path of stone steps, to climb which is part of the pilgrimage. It is one of the finest temples in Nepal, a veritable treasure-house of relics, its courtyard full of wonderful stone pillars and statues, the cloisters with exquisite carvings in many places richly colored and everywhere flashing sheets of hammered metal; brass and copper gilt beaten into every possible form—birds, beasts, fishes, dragons—standing out on a background of conventional design; bells everywhere; brass umbrellas, the emblems of royalty; great brazen and stone beasts crouching on all sides.

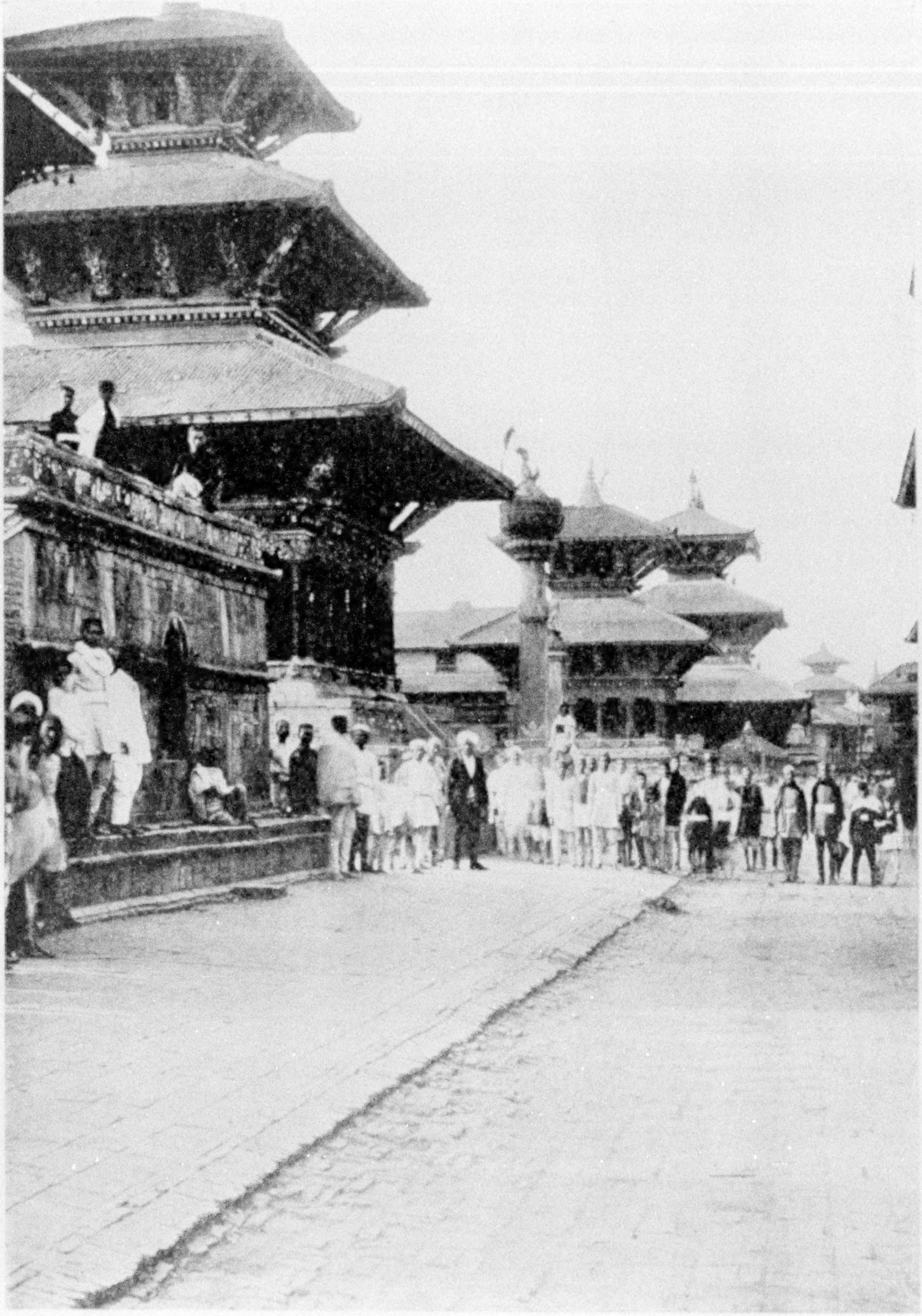
THE LEGEND OF THE GOD WITH THE TERRIBLE THIRST

The water garden of Balajee is a most fascinating spot, a mile or two outside Khatmandu, at the end of a long, shady avenue of trees. It is much frequented by the townspeople in the cool of the



ELABORATE WOOD-CARVING ON TEMPLE AT BHATGAON

The general use of the wooden lintel in Nepalese building gives the wood-carver his golden opportunity and the Nepal structures a distinctive character. Perhaps nowhere else are windows and doors so generally found that have been treated so ornately. Note, too, the intricate lattice-work pattern in the aperture. Small pieces of wood are dovetailed with tedious skill and patience to form the numerous designs employed.



STREET SCENE IN PATAN: A MUNICIPAL TREASURE-HOUSE OF ART AND HISTORY

Time, siege, and loss of its status as a capital have worked havoc with Patan: yet a full measure of its rich architecture, religious shrines and symbols, and old landmarks have survived all these ravages. A feature of its buildings is the decoration of many of the façades with sheets of embossed copper gilt.

XUM

TEMPLE IN BHATGAON SHOWING SEATED FIGURE OF BHUPATINDRA MALL IN BRONZE ON CARVED PILLAR AND FINE BRONZE BELL

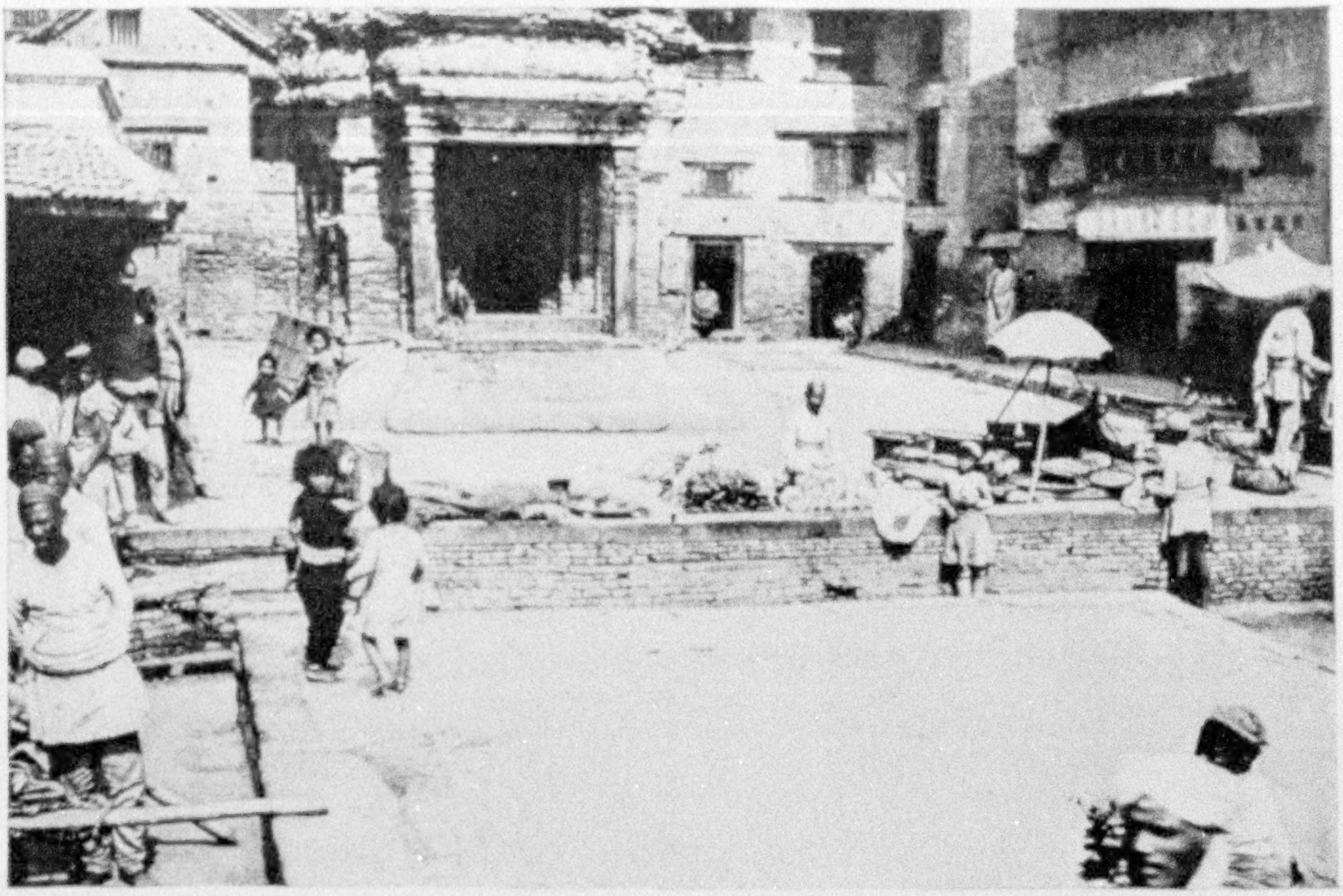
The Nepal builder's custom is to memorialize the patron, or some other prominent person of the period, by a statue on a tall pedestal near the structure he erects. In the case of the Durbar Hall of Bhatgaon a metal effigy was conceived in honor of the greatest of the city's rulers, whose image looks down upon one of the most beautiful buildings in all Nepal.

evening. The fresh spring water is collected in a number of terraced pools one above the other, clear as crystal and reflecting the green of the surrounding trees and bamboos. Along the supporting wall of the lowest pool is a row of about twenty dragon-head spouts, some enormous, others smaller, but all beautifully carved and executed, from which clear water splashes into a tank beneath.

Balajee has its own religious significance, found in a small tank on one side, near a temple decorated with Tantric carvings. Under the water lies a carved stone figure of Narain, about ten feet long, with a hood of cobra heads just rising above the water. It reclines on a stone bed with four carved stone posts, rising one from each corner, evidently at one time the support of a canopy. Fish dart here and there in the clear water which gently flows over it.

Narain is the creator Brahma, so called from *Nara* (waters) and *Ajana* (place of motion). At one time he suffered the most excruciating thirst, having drunk poison from the sea, and to assuage this he repaired to Gosainthan, in the snowy regions of the Himalayas, where, striking the mountain with his trident, he caused three streams of water to flow, forming a lake. Pious pilgrims fancy they can see the god lying in his bed of snakes. The tradition is that if ever the ruling king of Nepal visits this lake his death will immediately follow.

The great Buddhist stupa of Bodhnath, one of the oldest Buddhist temples in the valley, is a striking example of another form of shrine. The dome-shaped Chaitya rests on a semi-spherical mound surmounted by the square base of a spire capped by a golden umbrella, while great pairs of eyes have for a thousand years



A STREET SCENE OF KHATMANDU

In a Nepal city a public square is as invariable as is a common or green in a New England town. This square always contains the "durbar," or royal palace, and on the remaining sides usually are to be found shrines and temples. From it radiate irregular streets, and presently other thoroughfares will converge with these to form lesser squares—a method of city planning suggestive of that in our own National Capital. The streets, even when squalid, have an alluring quality, with their carved doorways, archways through which one glimpses a courtyard, and innumerable idols festooned with flowers.

and more looked out calmly and serenely to each of the four quarters of the globe from underneath the overhanging eaves.

Equally famous is Swayambunath, another temple of the same type and even richer and more frequented. It is most picturesquely situated on the top of a wooded hill approached by a steep, almost perpendicular, flight of 500 steps and closely surrounded by smaller shrines, each in its own way a gem of architecture and carving. In front of the temple is the gigantic Dorgee, or Thunderbolt of Indra, resting on a carved stone pedestal. Thousands of pilgrims from all countries flock to this, a Holy of Holies to the Buddhists.

THE NEPALESE EXCEL IN METAL-WORK

The art of the Nepalese, or, properly speaking, the Newars, is worthy of special consideration. It was the Newars who brought art to its highest state of perfection, and their influence has extended through these hills into Sikkim, Bhutan, and Tibet. Indian influence has penetrated from the south with the advance of Buddhism and has spread through the hills, along the Brahmaputra Valley, to Lhasa. On the other hand, Chinese influence is also strong and there has been intercourse with that country for many centuries.

Nepal probably excels in metal-work and wood carving, though followed very closely by Sikkim, Bhutan, and Tibet.

In their architecture, the Newars have distinctly drawn upon China, as shown in their pagoda-shaped temples, while in Sikkim, Bhutan, and Tibet the buildings suggest an even earlier period, possibly that of Egypt.

In their metal-work all these countries follow the same method. For beaten-work, the metal employed, whether copper, brass, silver, or gold, is first hammered to the required thickness, then shaped on a mold made of lac. It is then

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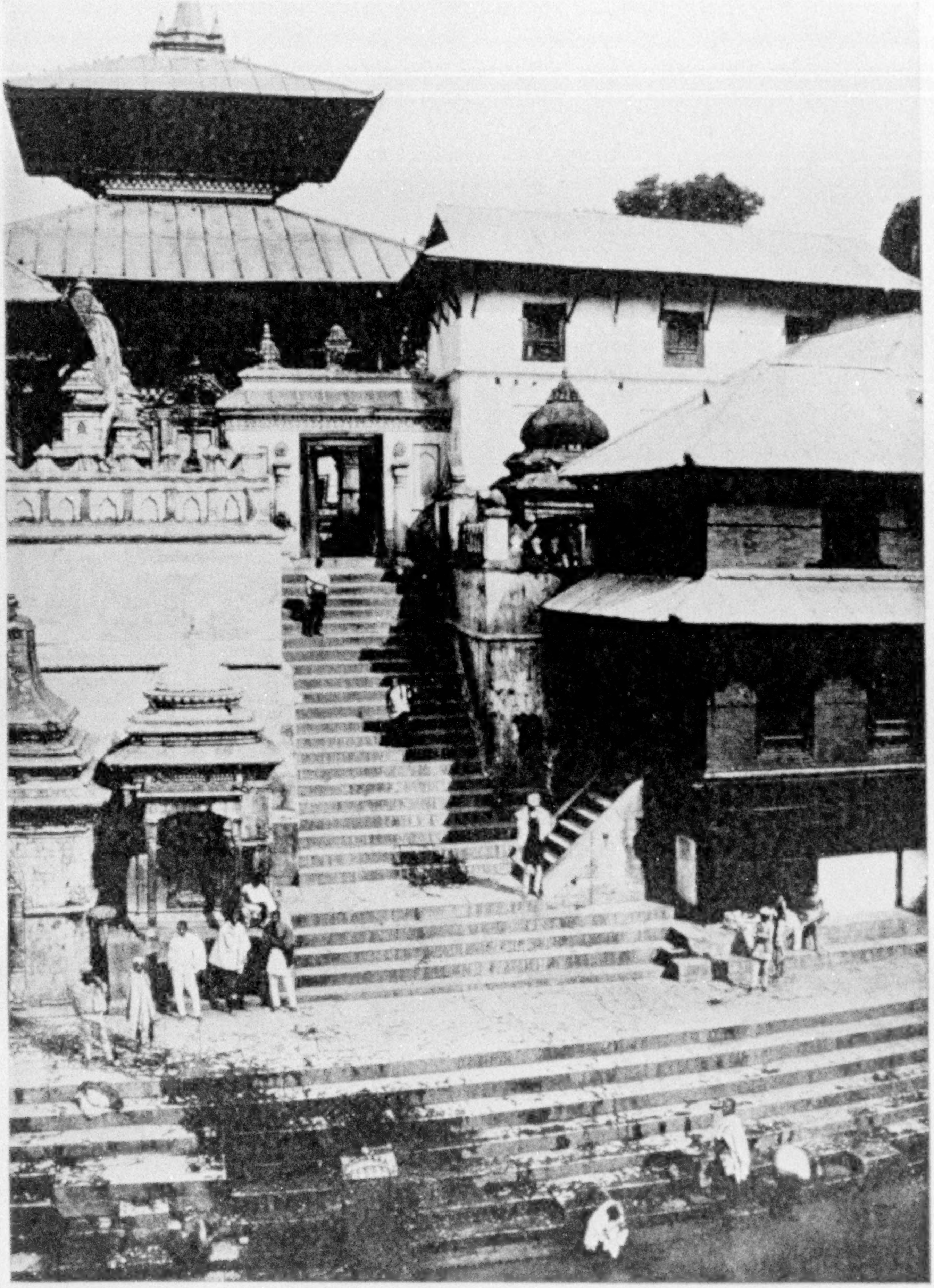


STEPS LEADING FROM THE HOLY BAGHMUTTI RIVER TO THE TEMPLE AT PASHPATI

Once a year Nepal is thrown open to visitors and multitudes flock to Pashpati. Temples and shrines of this holy place cluster along the Baghmutti River, where the dying aspire to pass away as the sacred waters lap their feet. To the casual sightseer the place has a rare beauty of architecture and setting, aside from its religious significance.

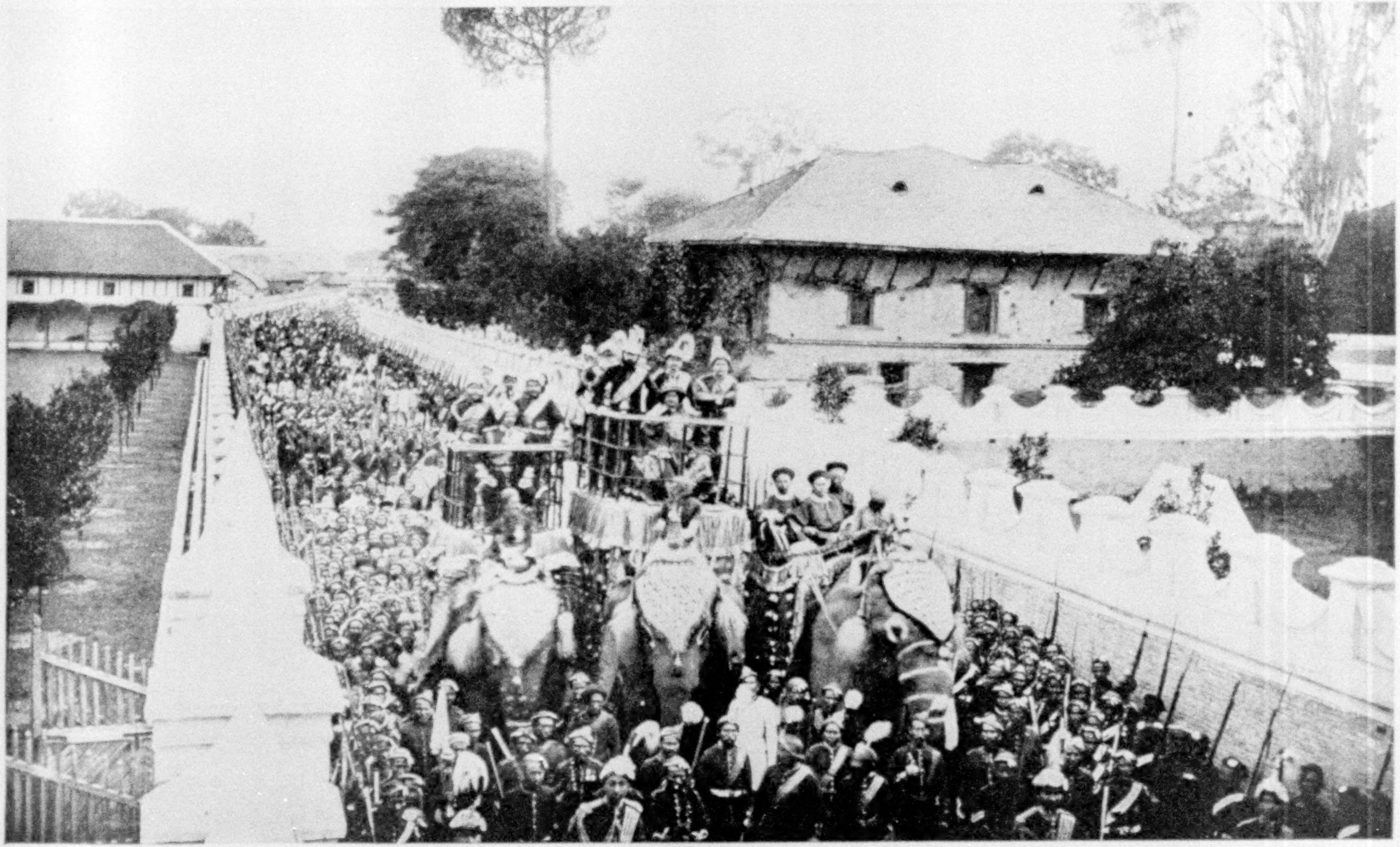
BALAJEE, WHERE NARAIN, THE MOSES OF THE BUDDHISTS, SMOTE A MOUNTAIN TO BRING FORTH WATER FOR HIS TERRIBLE THIRST

Today the crystal spring water at this hallowed spot is collected in terraced pools, and provides a shrine, a beauty spot, and an evening resort for residents of Khatmandu.

XUM

MISTY MORNING IN NEPAL JUNGLE

From the Nepal forests comes valuable timber, especially the "sal" employed so extensively in wood-carving; and there, too, the Nepalese hunt the bear, the buffalo, and the rhinoceros. The primitive mode of bear-hunting was to bind the left arm with a blanket, grasp a club with the right hand, clutch with the teeth the "kukri," a heavy knife with a seemingly infinite variety of uses, and to sally forth for a hand-to-paw encounter. When the bear was about to close, the hunter clubbed him on the nose and, while the animal still was dazed, dispatched him with the knife.

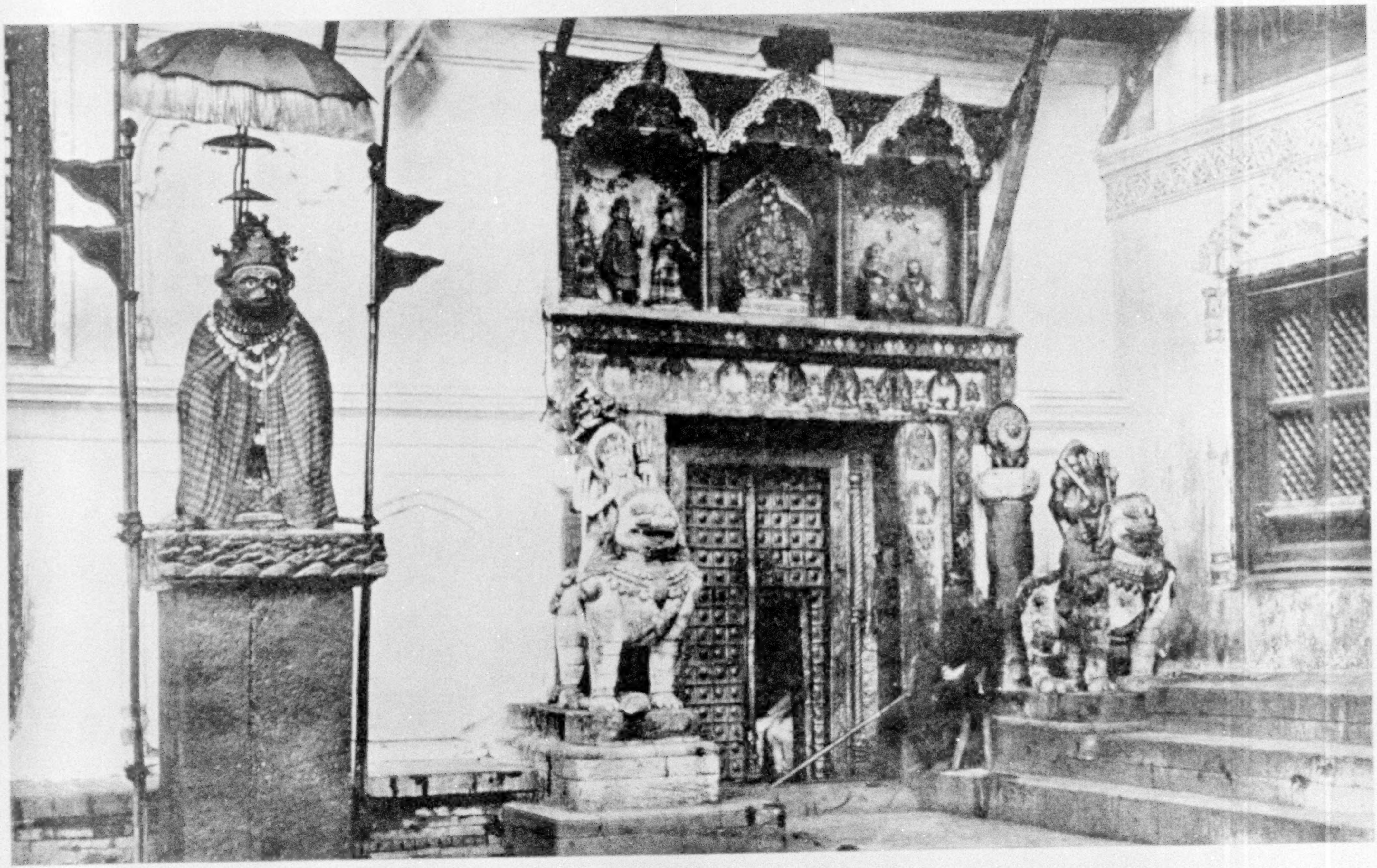


CEREMONY AT KHATMANDU IN HONOR OF A CHINESE EMBASSY

XUM

BUSY NEPAL STREETS KNOW NO SPEED LAWS NOR TRAFFIC POLICEMEN

Vehicles are almost unknown except in Khatmandu, and animal carriers are rare, for the country long ago launched a bad-roads movement as its major military protection. A considerable export trade is borne almost wholly on the backs of natives, who are accustomed to surprising loads, up to 300 or 400 pounds. For lighter town cartage, coolies use bamboo poles, as in this street scene in Bhatgaon.



HUNUARGAN DHOKA DURBAR

Nepal is a rare repository of Buddhist and Hindu lore, to be studied in images such as these. First ruled by the Brahmans of the Hindu faith, Buddhism was introduced, as in India; but Nepal did not abandon the old faith as India did. Rather, the religions were combined. Neither did the Mohammedans, who later planted their religion in India, influence Nepal in any degree.

GROUP OF SHRINES AT SWAYAMBUNATH, ONE OF THE HOLY CITIES OF NEPAL

Adherents of Buddhism and Hinduism are about equally divided among the estimated 5,200,000 population of the country. Nepal yielded to the painstaking study of Brian Houghton Hodgson, former British resident at Nepal, some of the most valuable manuscripts now existent concerning Buddhism. The isolation of Nepal and its even, arid climate combined to preserve records of unique historic value.

THE MARKET-PLACE OF KHATMANDU

The present capital is the Chicago of Nepal. It lacks the mellow age of Bhatgaon and Patan; but it is more colorful, busier, and more modern. It has been described as a "medley of tumbled wood-carving, brass grotesques sprawling over uneven pavements, quaint over-shadowing roofs surmounting rich red brickwork, and ever and about a moving variegated crowd, the whole combination in its confusion of decoration, buildings, and people presenting a scène of unrivaled orientalism."

rubbed over with wet clay, leaving a thin layer on the surface. On this the pattern is drawn or scratched and then hammered with various home-made instruments till the required relief is obtained. If the relief is to be high, the filling is removed from the metal and the process continued on the back, again turned, and the final finish put on. When gilding is required, an amalgam of gold and quicksilver is placed on the baser metal. The quicksilver is burned off and the deposit of gold is burnished with an agate.

The Nepalese combinations of copper or brass with silver are very fine, the salient parts in the silver often being picked out with gold.

PREPARING MODELS FOR METAL CASTING

In the work of casting, a model is made of wax and first thickly coated with a mixture of clay, cow dung, and charcoal. When the first coating is dry a second coating of the same substance, mixed with chopped straw, is applied, to give the required stability. The wax is then melted out and when the mold is perfectly dry the molten metal is run in. Some very excellent results are obtained, the detail and delicacy of pattern being wonderful. These methods are used for building ornamentation and altar utensils as well as for articles for domestic use.

Some excellent weapons, especially the kukri, a knife worn universally by the Nepalese, are made, and the better specimens are often chased and inlaid with gold. They also make good koras, or sacrificial knives.

Nepalese wood-carving is extraordinarily beautiful and ornate. Every scrap of wood is carved in some manner; the struts upholding the eaves of shrines represent satyrs and dragons, while windows and doors are examples of the most elaborate and minute workmanship of every

conceivable design. The verandas and overhanging balconies are highly ornamented and the work on some of the pillars is very bold and striking.

In weaving, the natives are deficient, the only cloth made being a coarse cotton of no artistic value.

In the neighboring State of Sikkim excellent metal-work is produced. The Sikkim wood carving is also good, but not comparable to that of Nepal.

The Bhutan metal-work is excellent, especially the swords, the wrought iron being hammered out after each of a succession of heatings and reheating in charcoal and eventually becoming a mild steel. These weapons are sheathed in most artistic silver and gold scabbards.

Some of the dagger sheaths are made of beautifully worked and pierced silver, with dragon patterns running through and beneath the open-work.

BHUTANESE SKILLED IN CLOTH-MAKING

The Bhutanese also make excellent cloths, both of cotton and silk fabric, and many of them are of exceptional quality as well as artistic design. Their wood-carving is on the same lines as that of Sikkim.

The teapot (see page 278) is an excellent piece of work and came from Lhasa. It was part of the property of the late Regent, who was in power when the present Delai Lama came of age. He was detected in using evil spells against the Delai Lama, and consequently was first degraded and eventually sewn into a skin and thrown into the Kychu River, his possessions being confiscated and sold, and the writer was lucky enough to obtain some of the articles, including this teapot.

The feudal system, which has prevailed among these hills for many years, is in a measure responsible for much of the artistic work of the natives, for it enables a man to put his whole energy into his work. He has no care about food or housing; it is to his master's and his own advantage to produce the most artistic work possible. Time is of no account and he has no occasion to work at high pressure or to work when the spirit does not move him.

All this tends to the creation of objects in which the artist can put his individuality.

The early history of Nepal is obscure and the outer world had but few relations with it prior to 1767.

NEPAL INVADED BY THE GURKHAS

In that year the Gurkhas, who claim descent from the Rajputs, a fighting race in northern India, invaded the Valley of Nepal under Prithi Narayain, and the Newar Rajah of Nepal appealed to the British for assistance. His prayer was granted and Captain Kinlock was despatched to his assistance in command of a small military force. Unfortunately, he commenced his journey in the rainy season, and fever attacked his men and himself to such an extent in the Terai, always notorious for its unhealthful conditions, that he was compelled to return, and the Newar dynasty, unable to withstand the warlike Gurkhas, was extinguished.

In 1792, after the Gurkhas, now firmly established as the ruling people, had plundered the temple of Digarchi in Tibet, the Chinese sent an army to punish them; and this they did to such good effect that the Nepalese were obliged to conclude a treaty with the Chinese general within a few miles of their own capital. In order to commemorate this victory of the Chinese over the Nepalese, a pillar was erected in Lhasa, where it still remains.

In 1814, after much provocation on the part of the Nepalese, who laid claim to land in the plains of India, war was declared on them by the East India Company, and at its conclusion, in 1815, the Treaty of Segowlie was signed and Brian Hodgson was appointed to be the first Resident at the Nepalese Court.

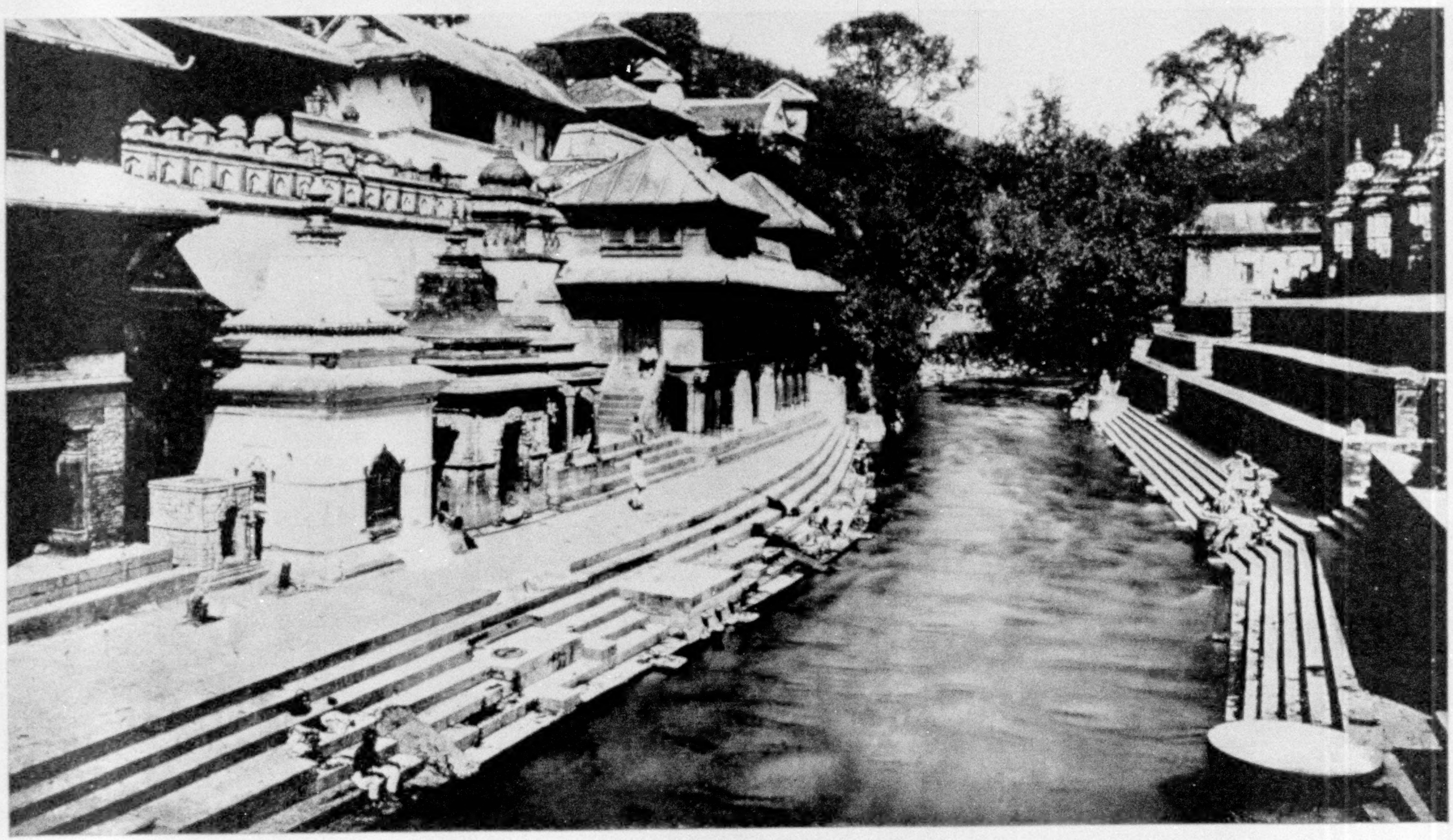
MOST OF NEPAL'S MAHARAJAHS DIE SUSPICIOUSLY YOUNG

From this time onward, as it doubtless was before, had we known about it, the history of Nepal is one long chronicle of bloodshed and treachery. The different factions, each desirous of obtaining power and equally callous as to the means used to obtain it, stopped at nothing. The post of Minister to the Maharajah was eagerly sought, the Maharajahs being,

THE FINAL TEST OF PIOUS PILGRIM'S ENDURANCE AT SWAYAMBUNATH

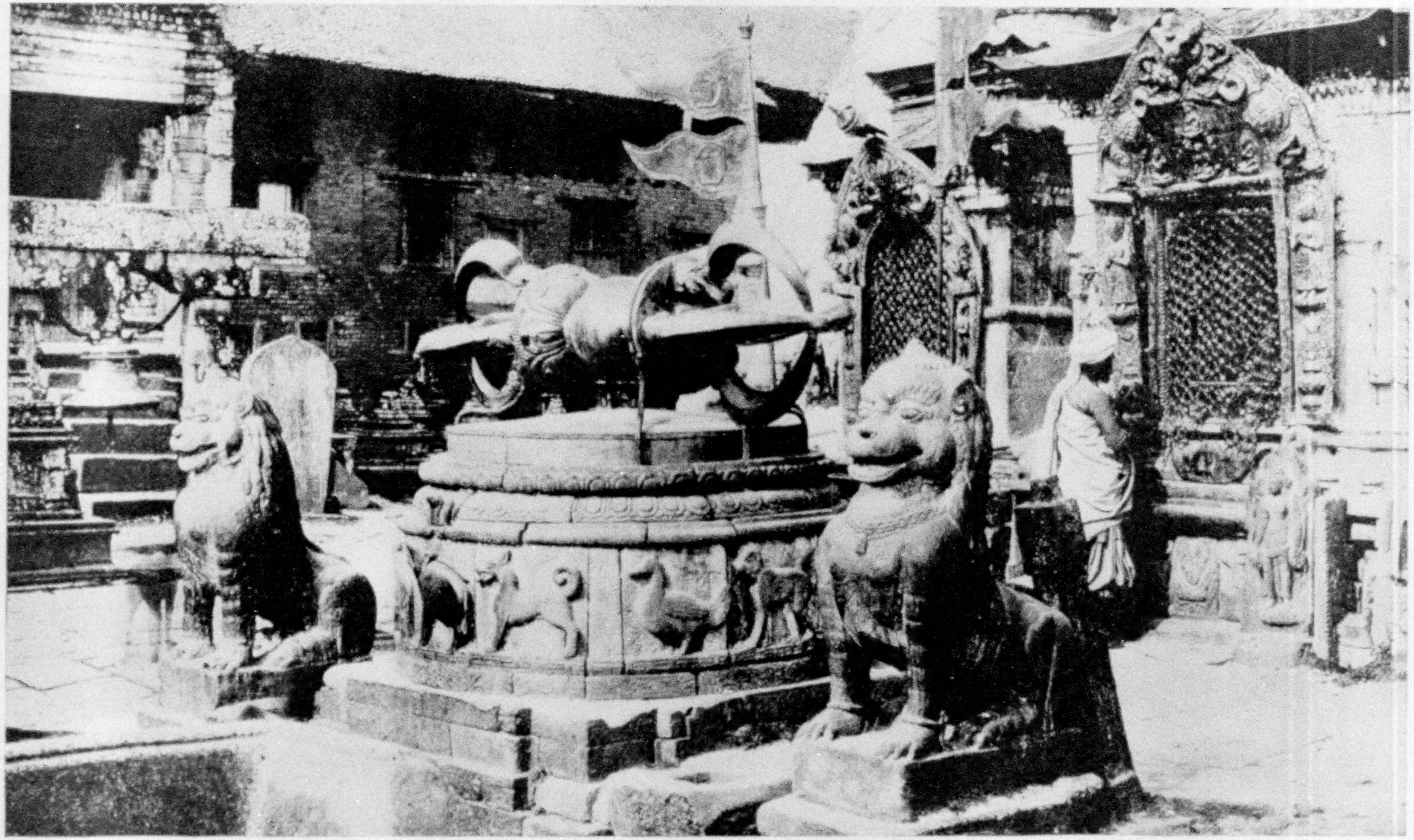
In Nepal the pilgrimage still is as dominant as in the days of the Crusades. The last stage of the worshiper's journey usually consists of steps, and the revered Swayambunath, atop a wooded hill, is reached by a flight of 500 steps.

XUM



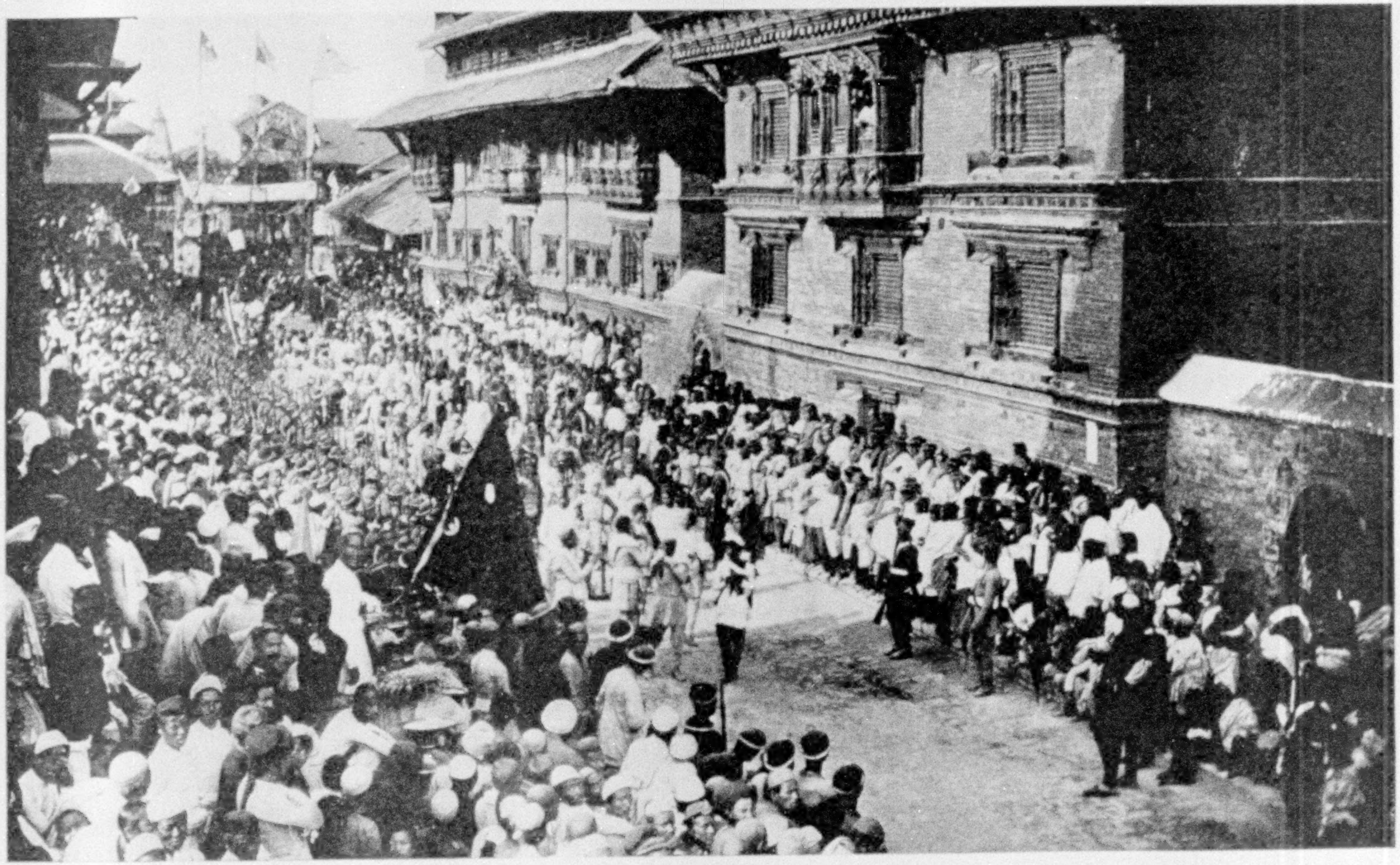
A TEMPLED, VENICE-LIKE VISTA ALONG THE GANGES OF NEPAL

In the Valley of Khatmandu alone are some 2,700 shrines. Many of them are elaborate temples, such as this of Pashpatinath, built along the banks of the sacred river, Baghmutti. The sick are brought to be dipped in the waters of this stream and on its banks the dead are cremated. Formerly the widow would jump into the fire as it consumed her husband's body, but this practice (sati, or suttee) has been abandoned except in remote regions.



THE THUNDER-GOD: A HOLY OF HOLIES AMONG HINDUS OF NEPAL

This gigantic Dorgee, or Thunderbolt of Indra, mecca of pilgrims from far beyond Nepal's borders, represents the Thunder-God of Hindu mythology, whose function was to transfix the demon who held back the rain, and thus bring about refreshing showers. It is situated at the top of 500 steps before the temple Swayambunath.



MAHARAJA DEB SHAMSHEIR'S STATE VISIT TO PATAN

Life in a Nepalese city seems to the uninitiated just one Mardi Gras after another. A dignitary's visit is the occasion of a special holiday, while there would be more red-ink dates than black were the festivals designated as on an occidental calendar. There are ten national celebrations and numerous other local and religious observances. Some last a week, one ten days, and not only the attendance, but the part each person plays, is regulated by rigid custom. One family, for generations, will have danced, another provided music, a third will have built vehicles to be used for the gods, and so on.

STREET SCENE IN PATAN, THE LOUVAIN OF NEPAL

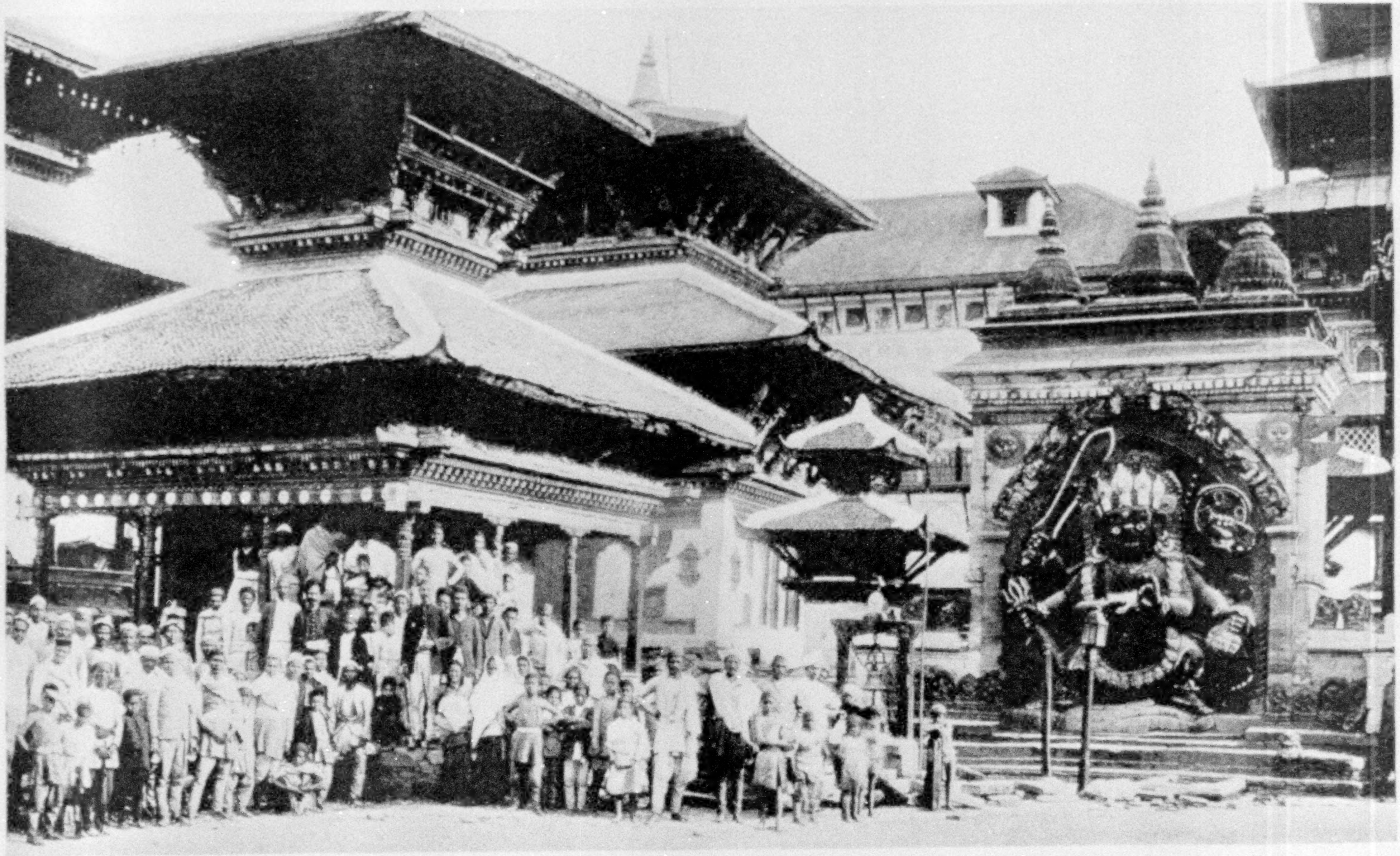
Eight years before our Declaration of Independence was signed Patan was taken by the Gurkhas, and, as in Belgian cities in 1914, plunder, barbarity, and vandalism ensued. Though Patan is a Nepal metropolis, it never recovered, and today broken shrines, shattered arches, and mutilated monuments are to be seen at every turn. Of its streets Hodgson quaintly said: "It is often requisite to walk heedfully . . . lest, perchance, you break your shins against an image of a Buddha."

ARTISTRY OF THE BORDER STATES (SEE PAGE 272)

Top row, from left: Water bottle in iron inlaid silver, Tibet; teapot, Tibet; hat ornament, copper-gilt set turquoises, Tibet; teapot, Sikkim; image, Tibet; cover for porcelain cup, Tibet; bell, Tibet; dorji, Bhutan; pair of cymbals, Tibet. Center: Wood-carved book back, gilt. Bottom row: Enamel cup, charms, silver butter lamp, set four copper-gilt Buddhist emblems, Buddha, given to author by the Thi Rimpoche in Lhasa; bell, Bhutan; butter lamp, Tibet; cup cover and stand, Sikkim.

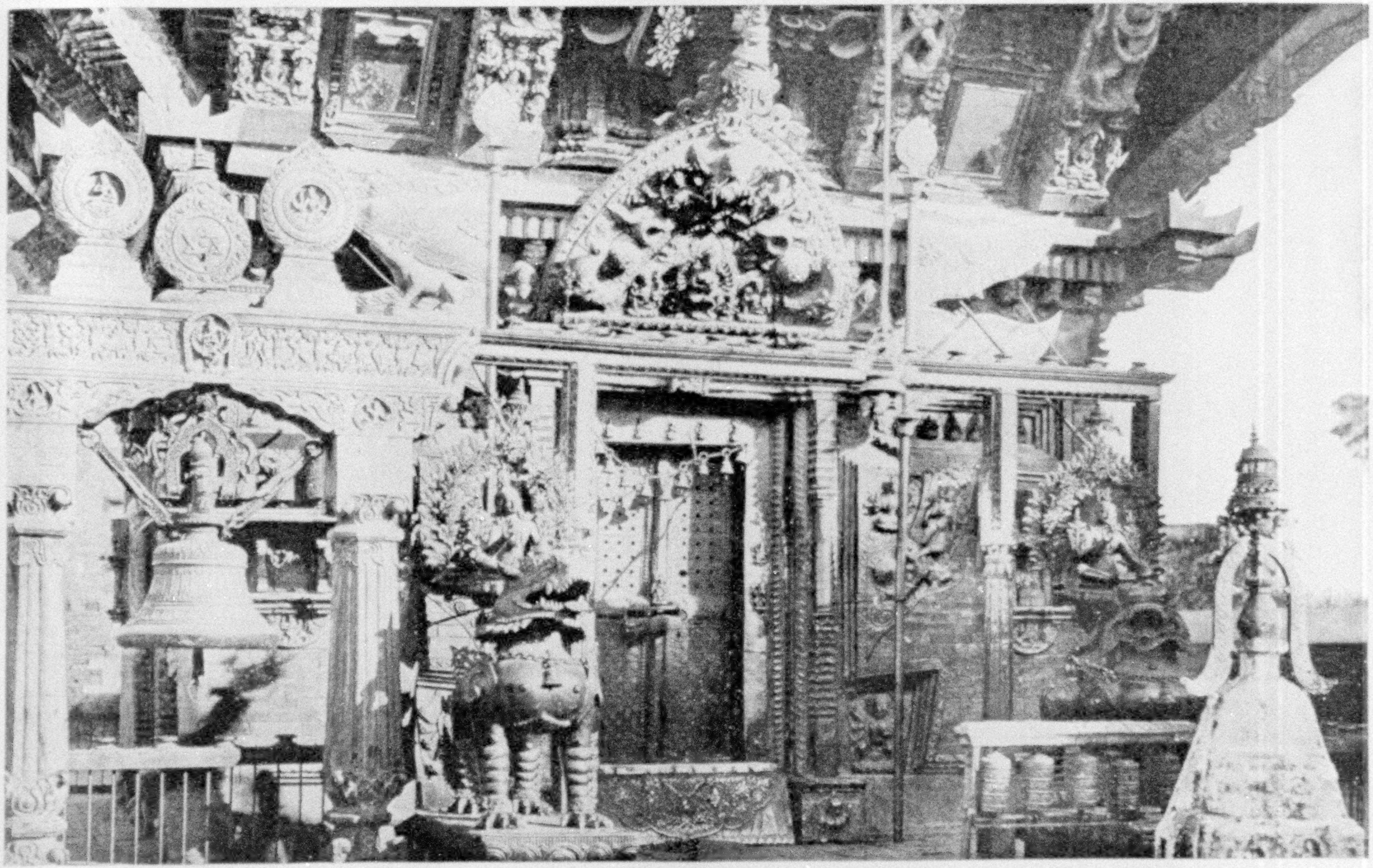
GROUP OF NEPALESE LADIES

Nepal (also Nipal) is an independent State on the southern slope of the Himalayas, bounded by Tibet on the north, by Sikkim and Bengal on the east, and by Bengal and the United Provinces of British India on the south and west. The Nepalese are considered to be a Mongolic people, with large infusions of Dravidian and Aryan blood—a hybrid race of Mongolian and Caucasian mixture. The typical representatives of the Nepalese are the Gurkhas, whose Aryan ancestors from Rajputana mixed with the aborigines.

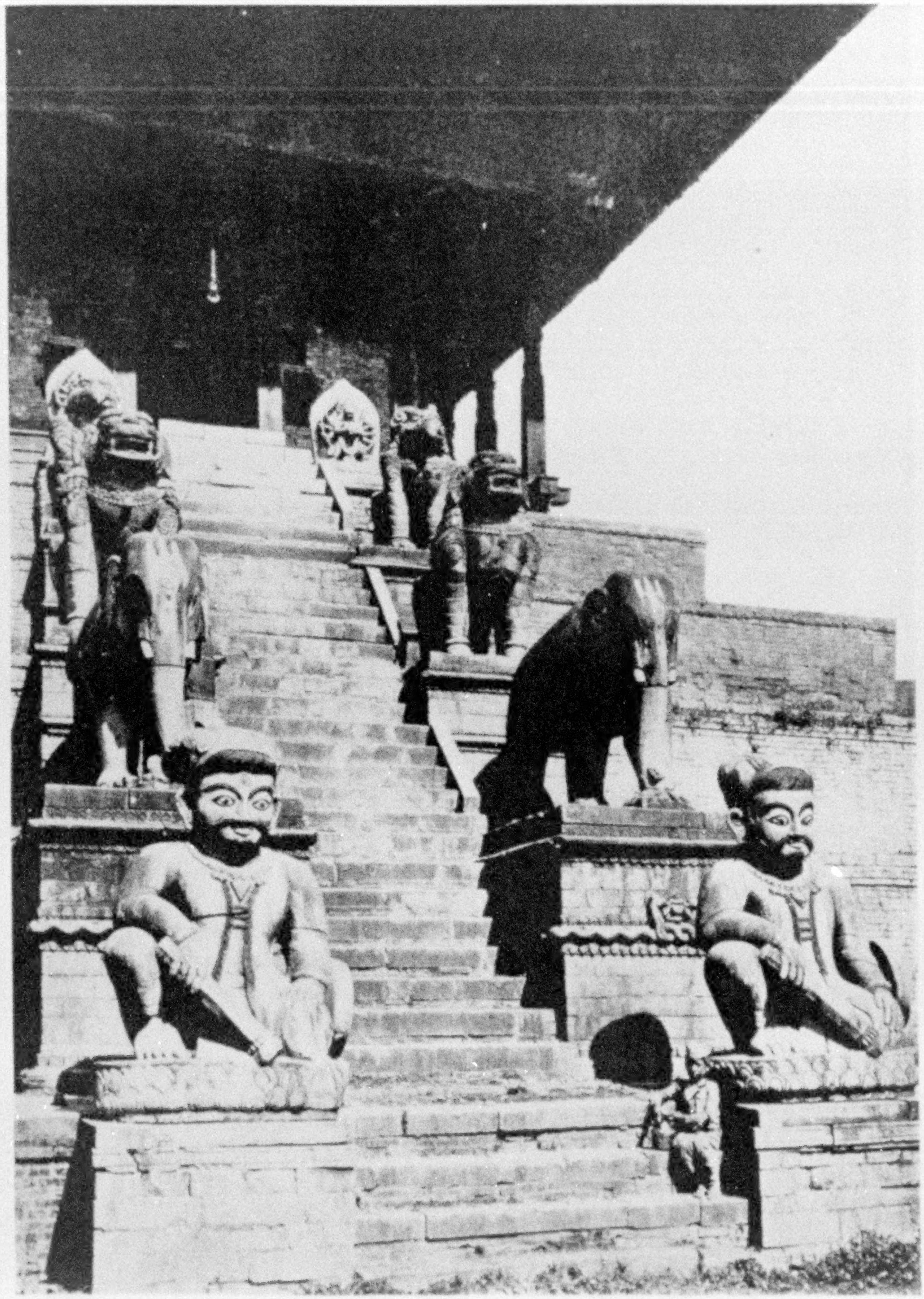


ART AND CHILDREN IN EVIDENCE EVEN IN THE MARKET-PLACE OF KHATMANDU

The prolific art of Nepal knows no conservation; it pervades the marts of trade as generally as it does temples and homes. This buoyant energy, further exemplified in the rapid increase of population—for a glance at this picture will show that race suicide is not a Nepalese problem—explains why Nepal natives seek an outlet along the foothills of Bhutan and into Assam.



EXAMPLE OF FINE CARVING IN WOOD AND STONE, SHOWING BRONZE "SINGIS," OR DOGS, GUARDING A TEMPLE GATE, PATAN



FIGURES AND STEPS LEADING TO THE TEMPLE OF THE FIVE HAGIS AT BHATGAON

On the lower steps are represented "The Wrestlers," the Samsons of Newar tradition, each supposed to possess ten times the strength of an ordinary man.

even to the present day, mere puppets in their ministers' hands. Most of them die suspiciously young and before they can take the reins of government into their own hands.

Internal intrigues and persistent hostility on the part of the Gurkhas toward the British Government continued till the year 1846, when Jung Bahadur, a remarkable man, became Prime Minister, a post he retained till his death, in 1877. During his tenure of office Nepal enjoyed comparative peace, and after his visit to England in 1850 the bearing of the Nepal Durbar became more friendly.

In 1854 the Nepalese again invaded Tibet, and shortly after a treaty was concluded by which the Tibetans agreed to pay Nepal an annual sum of R100,000 ($33,000), but hostilities in a minor degree were carried on till 1883.

At the time of the Indian Mutiny, in 1857, the Nepalese rendered great assistance to the British Government, and as a reward the whole of the territory in the Terai, forfeited in the war of 1814, was restored to them.

HUNTING GROUND FOR ROYALTY

In 1876 the Prince of Wales, afterward King Edward VII, visited the Nepal Terai on a shooting expedition and was entertained by Jung Bahadur's brother, General Dhir Shamshere Rana Bahadur.

After Jung Bahadur's death there were the usual successional intrigues, some peaceful and some accompanied by much bloodshed, till in 1901 General Chunder Shumsheer Jung Rana Bahadur was appointed Prime Minister. He visited India twice, England once, and was made Knight Grand Commander of the Star of India in 1905.

In 1904 the Nepal Durbar received the thanks of the Government of India for the correct and very friendly attitude adopted during the British Mission to Lhasa.

His Majesty the King Emperor visited the Nepal Terai on a shooting expedition in 1912, after the Delhi Durbar, and had excellent big-game shooting. Sumptuous camps were prepared and roads were made in all directions through the jungle.

Nepal maintains a well-drilled and efficient army of about 32,000 infantry and 2,500 artillery, with about 100 serviceable and 150 unserviceable guns. The Maharajah is not permitted to have any intercourse with Europeans, and should the Resident or any official have occasion to interview him it is always in the presence of some Nepalese official.

The Kingdom of Nepal is to be found between latitude 27° 30′ and 30° north and longitude 80° and 88° east. In the south it runs for some distance into the plains of India, along the Terai, or flat ground, at the foot of the hills, its area embracing about 54,000 square miles.

In consequence of Nepal's excessive seclusion, the internal administration has remained almost entirely unaffected by European influence or ideas.

VALLEY ONCE WAS LAKE

In the Valley of Khatmandu itself, called by the natives Nepal, and covering about 300 square miles, are situated the modern capital of Khatmandu and the old and much more picturesque capitals of Patan and Bhatgaon. At some time in the remote past this valley was a lake, and the erosion of the vast accumulation of water must eventually have cut for itself an outlet through the barrier of mountains to the south. Gradually there was left bare the rich alluvial deposit now drained by three rivers—the Baghmutti, Vishnumatti, and Manchera.

These rivers have cut deep channels, through which they make their way till, converging in a narrow gorge, they finally find their outlet to the plains of India as the Baghmutti.

This old lake bed forms an expanse of the most fertile soil, industriously cultivated from end to end, on which is grown a succession of many and varied crops throughout the year.

Old legends also hand down the tale that the valley was in early days filled with water, and attribute its drying up to the miraculous power of one Manju Sri, of whom it is related that he smote the mountain with his sword, thus making the cutting by which the lake was drained and the valley became fit for habitation.

The population of the valley is about 500,000, of which the town of Khatmandu contains 30,000.

HUMAN EMOTION RECORDED BY PHOTOGRAPHY

By Ralph A. Graves

When Shakespeare observed that "there's no art to find the mind's construction in the face," he had reference to that mind which employs artifice to conceal its motives and its machinations. In the accompanying studies in expression, however, the camera has been employed to record the facial play and byplay of those who have naught of their emotions to withhold from the world. Here the lens of the photographer has caught and preserved the fleeting joyous thought, the moment of tranquil reverie, the sorrow without shame, the eternity of oppressive suspense, the exuberant mirth of the carefree, the rollicking gayety of childhood, the eager earnestness of youth. All these moods and fancies the faces of normal men, women, and children reflect with unfailing faithfulness. Here one finds recorded in pictures the "geography of the human heart"—its cares, its longings, its foibles, and its aspirations.

It needs not the experience of a deep student of human nature to read in the face of the immigrant mother (Plate I) her story of struggle, of pain, and of sorrow in the Old Country. But, happily, in her pensive smile there is the suggestion of a brighter day to come in the hope of realized ambitions for her children, who are to be given an unhampered start in the New World; and it requires no wild stretch of the imagination to read on this mother's lips an echo of the words of a famous Roman matron, "These are *my* jewels."

The laughter of children is a universal language, as readily understood in Sweden (see Plate II) as on the lips of our own kith and kin in America (see Plate VI).

"The light of love and fainting faith" contend for supremacy in the faces of those mothers who stand and silently await the glimpse of loved ones immured behind hospital walls (Plate III).

It can never be said of the mother, sister, or wife who watched the solemn pageantry of military funerals during the World War that she was one of those who "never sees the stars shine through her cypress-trees"; for we see reflected in the face of each one so bereft that she is soothed and sustained by that consolation which crowns her grief, the consciousness of a loved one's noble sacrifice (Plate IV).

As we gaze upon the sweet content of the two faces on Plate V, we cannot but feel that the poet had in mind such as these when he wrote:

> "And as the evening twilight fades away,
> The sky is filled with stars invisible by day."

The venerable patriarch of Plate VII holds the even tenor of his way "through the sequester'd vale of rural life."

He who smiles first fights best would be a true paraphrase of a familiar saying, if facial expression is an index of stamina. And who can deny that it is, after studying the light which dances in the eyes of the men in khaki shown on Plate X?

A wise student of human nature once observed that in the shadow of a great affliction the soul sits dumb. How could this truth be illustrated more strikingly than in the faces of the loved ones who watch and wait for the victims to be brought from the horror chambers of a mine disaster?

That "health is the vital principle of bliss, and exercise of health" would seem to be the creed of the "Snow Birds" shown on Plate XII, while those two "studies in color" on Plates IX and XIII, may seem to indicate that a danger avoided is a danger scorned, and that "good digestion waits on appetite."

France and America contend for geniality in the facial expressions reproduced in Plates XIV and XV, while in the final scene of the series we see that

> "The world is all before them, where to choose
> Their place of rest, and Providence their guide."

Photograph by Lewis W. Hine

SMILES

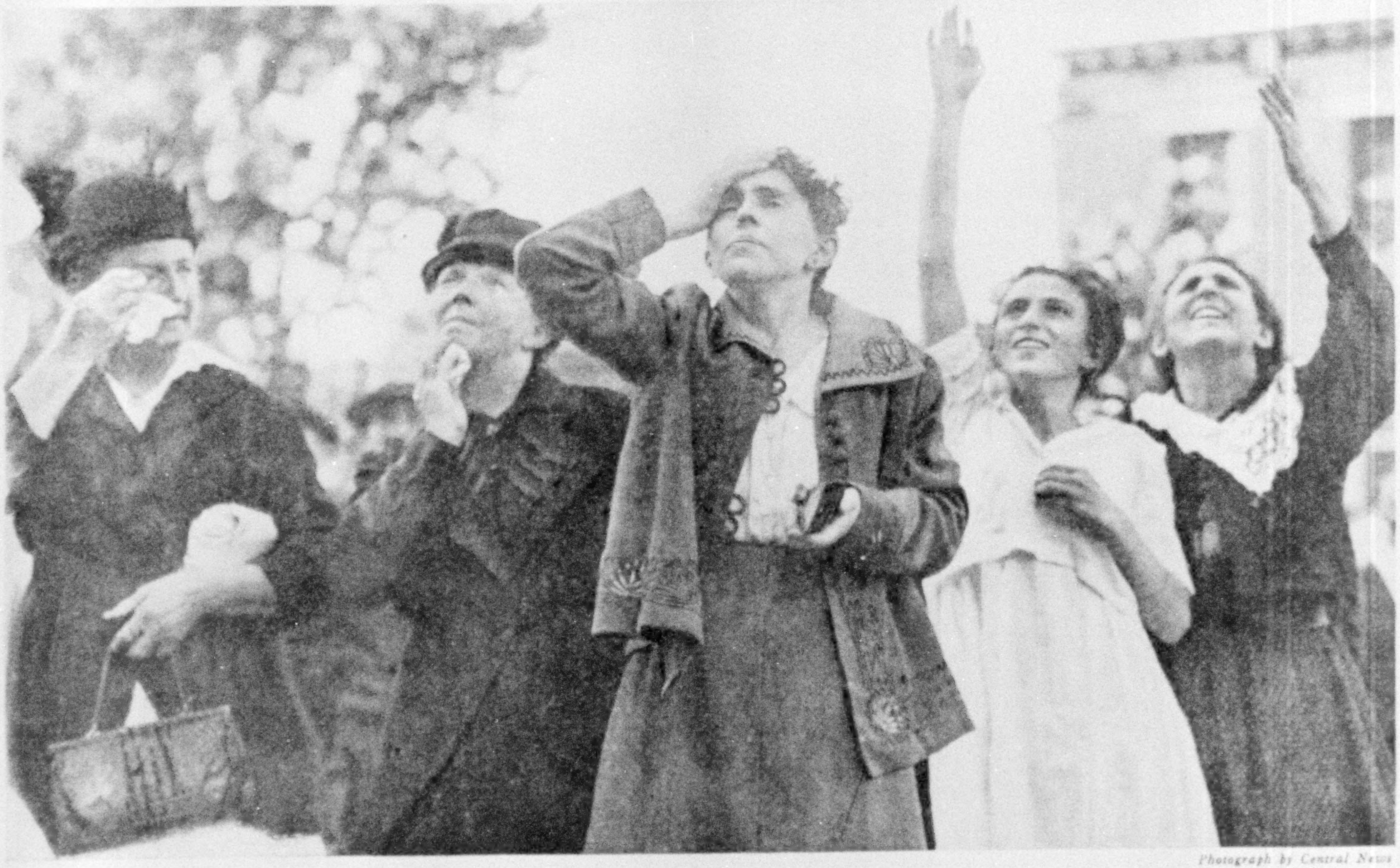
*H*ere is the retrospective smile of the immigrant mother, waiting with her children at Ellis Island—a smile that suggests the elusive quality of Leonardo da Vinci's Mona Lisa del Giocondo, and typifies the mystery of that giant, enigmatic Russia from whence she came. Then there are the fresh, frank smiles of the children, eager and expectant for new experiences in the land of hope — America.

XUM

Photograph by G. Heurlin

THEY SPEAK A FOREIGN LANGUAGE, BUT THEIR FACIAL EXPRESSIONS NEED NO INTERPRETER

A passing American motorist could not understand a word these Swedish children said, but he caught their greetings on his camera plate. For facial expression is an Esperanto long since become universal, and joy, surprise, wonder, and curiosity, all registered here, look alike from Siberia to the Sahara.



Photograph by Central News

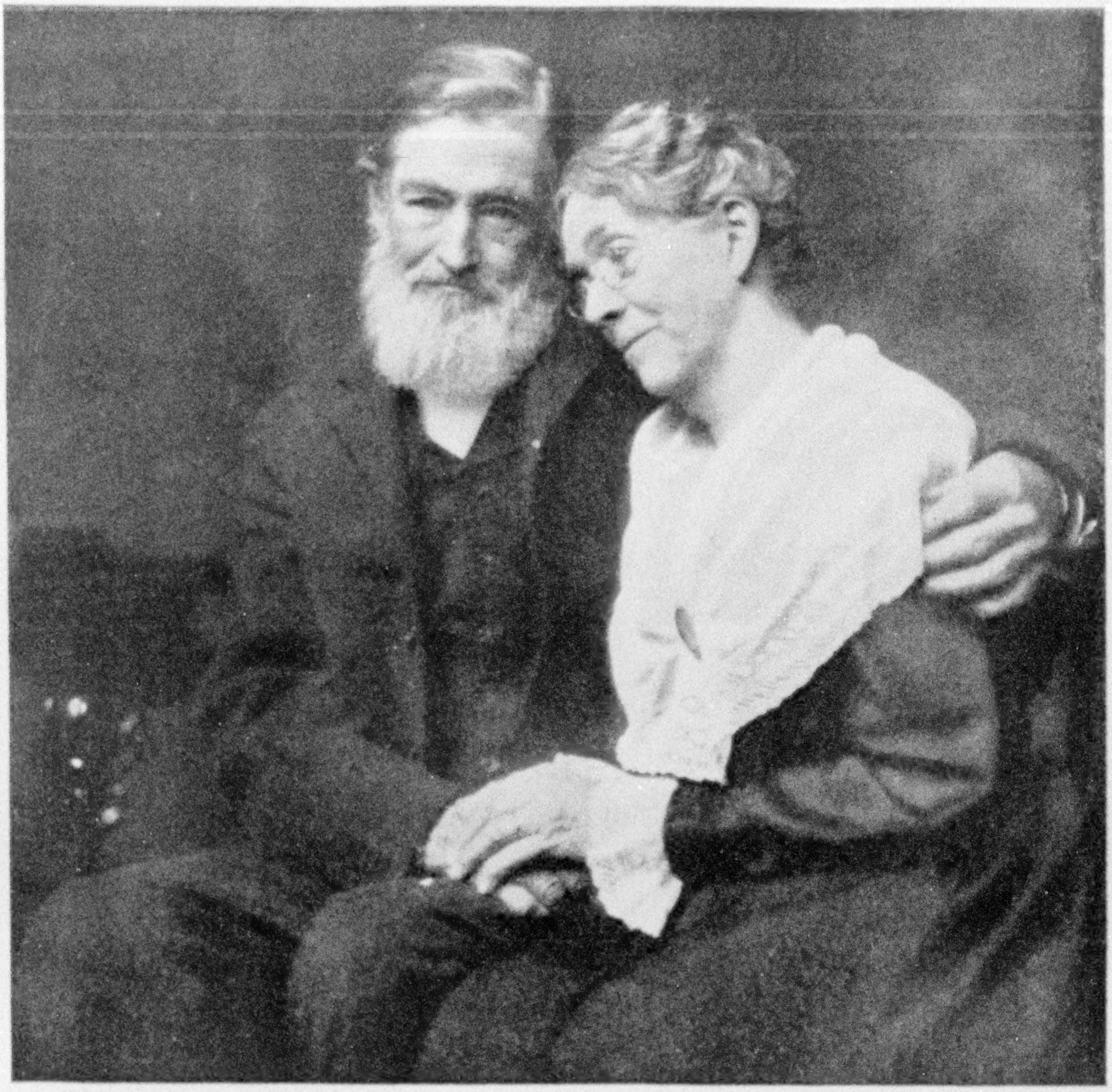
MOTHER LOVE

Grief, anxiety, sudden shock and recognition are strikingly illustrated by these East Side mothers photographed as they stand unconscious of the camera below the windows of a children's hospital during an infantile paralysis epidemic.

XUM

© Underwood & Underwood

"Tell my sister not to weep for me,
and sob with drooping head,
When the troops are marching home again,
with glad and gallant tread,
But look upon them proudly,
with a calm and steadfast eye,
For her brother was a soldier too,
and not afraid to die."



Photograph by Belle Johnson

John Anderson my jo, John,
We clamb the hill thegither;
And monie a canty day, John,
We've had wi' ane anither:

"Now we maun totter down, John,
And hand in hand we'll go
And sleep thegither at the foot,
John Anderson my jo."

XUM

Photograph by Harry F. Blanchard

"THREE IS A CROWD"

Photograph by R. R. Sallows

THE PATRIARCH OF THE FLOCK

Photograph by Lewis W. Hine

BIGGER THAN A "WUXTRY"!

*I*n the cold gray dawn under the shadows of Brooklyn Bridge the newsboys, keen merchants of future years, have ceased their calls to give undivided attention to the passing fire apparatus as it clangs its way to an early morning blaze.

Photograph by U. S. Signal Corps

SAFELY THROUGH!

Phosgene missed him, but "laughing gas" found a willing victim. Relief is expressed in this "ivory" smile—relief in having escaped the enemy's poison and in taking off the contraption of science which saved his life but cramped his style.

Photograph by U. S. Signal Corps

"FIRST CLASS SERVICE!"

The pluck and unfailing good humor of the American soldier in foreign service made him admired by all allied nations; under the most adverse conditions the American was "Sitting on the Top of the World!"

Photograph by U. S. Bureau of Mines

SUSPENSE

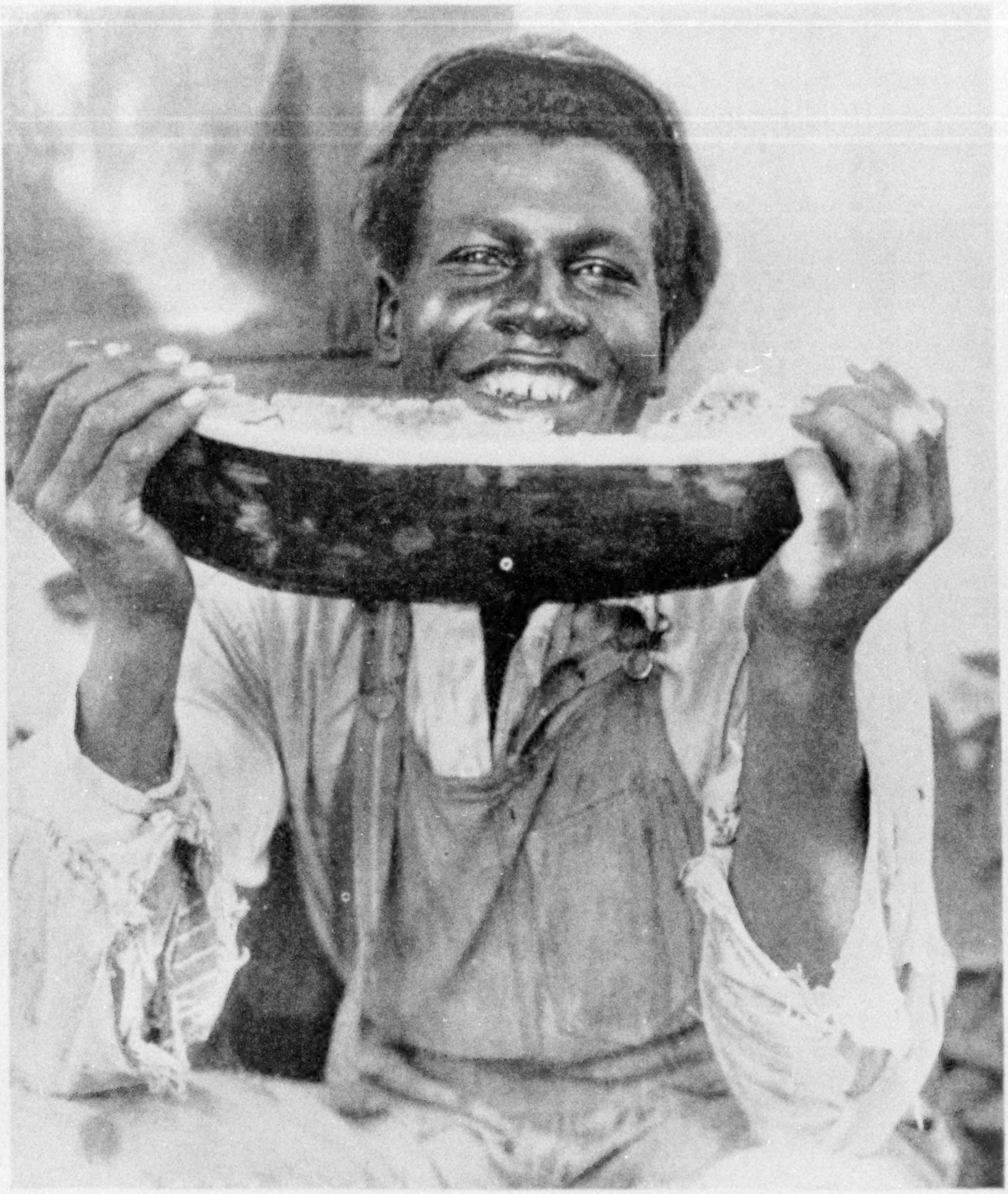
Friends and families waiting at the mouth of a mine after an explosion. Fellow workmen are engaged in a feverish attempt to rescue the imprisoned miners, while the feelings of the waiting ones are mirrored in their faces.

XUM

Photograph by Ansel F. Hall

"SNOW BIRDS"

These Yosemite National Park Rangers, who almost alone are privileged to enjoy the wintry beauties of this great preserve, must have their fun, and this time it is posing for the photographer after a battle in the snow. Their faces register the full enjoyment of extreme good health.



Photograph by Belle Johnson

AN AFRICAN AFFINITY

"The only trouble about watermelon is that it gets in one's ears."

XUM

Photograph by C. A. Slade

MERRIMENT IN BRITTANY

The ladies laugh without restraint, but the stalwart sailor quietly and with proper regard for the dignity of the uniform. Perhaps, however, it's his own joke, and modesty forbids. The youngster has missed the point.

Photograph by John Oliver La Gorce

WHOPPERS!

The story of yesterday's catch is being vivaciously told to a deeply interested but slightly incredulous listener.

XUM

Photograph by Charlotte Fairchild

A LESSON IN GEOGRAPHY

TAHITI: A PLAYGROUND OF NATURE

By Paul Gooding

TAHITI lies far from the feverish activities of modern industrial life. It is more than 1,000 miles below the Equator, in longitude about 150 degrees west; 3,000 miles from Australia, 3,600 miles from San Francisco, 4,500 miles from the Panama Canal, 6,000 miles from Asia. By old trade routes—via the Suez Canal and Australia—it is nearly as far from New York as all these distances combined, but the Panama Canal reduces this to 6,500 nautical miles, thus effecting a saving of 10,000 miles.

Ever since its discovery by Wallis in 1767, the Otaheite of early exploration days—or King George the Third's Island, as this navigator called it—has been famed as an isolated jewel remarkable in contour, rich in verdure, blest with a pleasant, healthful climate, and inhabited by friendly people of handsome physique. The impressions of Wallis are those of Bougainville and Cook and their conceptions are, in the main, those of the average visitor of today.

Tahiti is an extraordinary work of creation—a jagged, fertile cinder from volcanic pits, perhaps, or a verdant fragment of a sunken continent. It is indeed a steepled gem of wondrous green within a teeming coral ring.

NATURE SPARED NO GIFTS IN ADORNING TAHITI

This captivating heart of Polynesia presents abundant evidence that in its adornment nature was in a liberal mood. Here the eye is delighted by leafy luxuriance stretching from palm-fringed beach to loftiest mountain crest; by the brilliant colors of land and sea; by the high physical standards of the natives, both men and women.

Here the ear is soothed by the wash of an inner sea; by the flow of gentle streams or of boisterous mountain torrents. Here the tired or distressed mind is composed and renewed by lasting quietude, and by the knowledge that madly competitive centers are far away.

Overshadowing all are the mountains. In every colossal pile there is distinctiveness. Here a mighty slab rises high above a valley; there a peak with a triangle summit shoots thousands of feet upward; beyond, lofty columns hundreds of feet in thickness stand in solitary grandeur; another turn and a shaft cuts the sky with an edge like an enormous knife—an edge to which tree, shrub, fern, and vine cling tenaciously.

As its indulgent climate might well suggest, Tahiti is an amiable country. Along all its shores one sees smiling, care-free faces, bright, liquid eyes expressing contentment and inviting confidence, and generous hands outstretched in welcome. Everywhere one hears musical voices carrying notes of kindness and sympathy; daily the visitor is gladdened by the gracious "Haere mai!" or the social "Iorana!"

AN ISLAND OF PRIMITIVE BUT NOT BARBAROUS PEOPLE

Tahiti is not an abode of savages. It still has primitive life, but of barbarism it has none. There life and property are safe; compulsory education quickens the mind of the youthful; and the church, the vernacular religious press, and contact with the Caucasian broaden, in a limited way, the intellect of the adult.

I first saw the smiling Kingdom of Pomare in a timorous dawn soon to be emboldened by the streamers of a mountain-hidden sun. In waters placid and clear my steamer lay at anchor. Behind it long lines of milk-white surf lashed against coral barriers.

To my right and to my left strangely shaped mountains cleaved the sky, and in their dense wooded depths flitted fantastic outline of crag, peak, and precipice. On a coral-strewn shore tall palms flapped a lazy welcome. In the distance rose the green spires of La Diademe. Between them and the jutting reef, Papeete, drowsy capital and metropolis of Tahiti and its far-flung dependencies, gently rose and fell in a mirroring sea.

As we anchored inside the reef, the sun was on the point of surmounting its lofty obstruction. Shafts of gold shot over

XUM

Photograph by L. Gauthier

ONE POSTURE OF THE FAMOUS "UPA UPA" DANCE OF THE TAHITIANS

Note the musical instrument. Add to its drawl and to those weird contortions the effect of the droning "himinies," or folk-songs, which, like the dance, have varying effects upon the auditors. Some visitors report the monotones insufferably tedious; others have professed to find in the undertones, that give an effect like a bagpipe, a crude precursor of Wagnerian music. It is interesting to note that Tahiti parents do not permit their children to indulge in the dance until they have reached the age of eighteen or are married.

the island. Suddenly sunbeams bathed mountain summit and valley floor. The great Ra of the Polynesian was now well advanced on his daily march across the sky. In the solitudes of the interior, dark with luxuriant foliage, vapor shadows fantastically flitted about. In the burst of light I saw more clearly the strange features of rocky height, the palm-sheltered shores, and the secluded town beneath leafy sunshades.

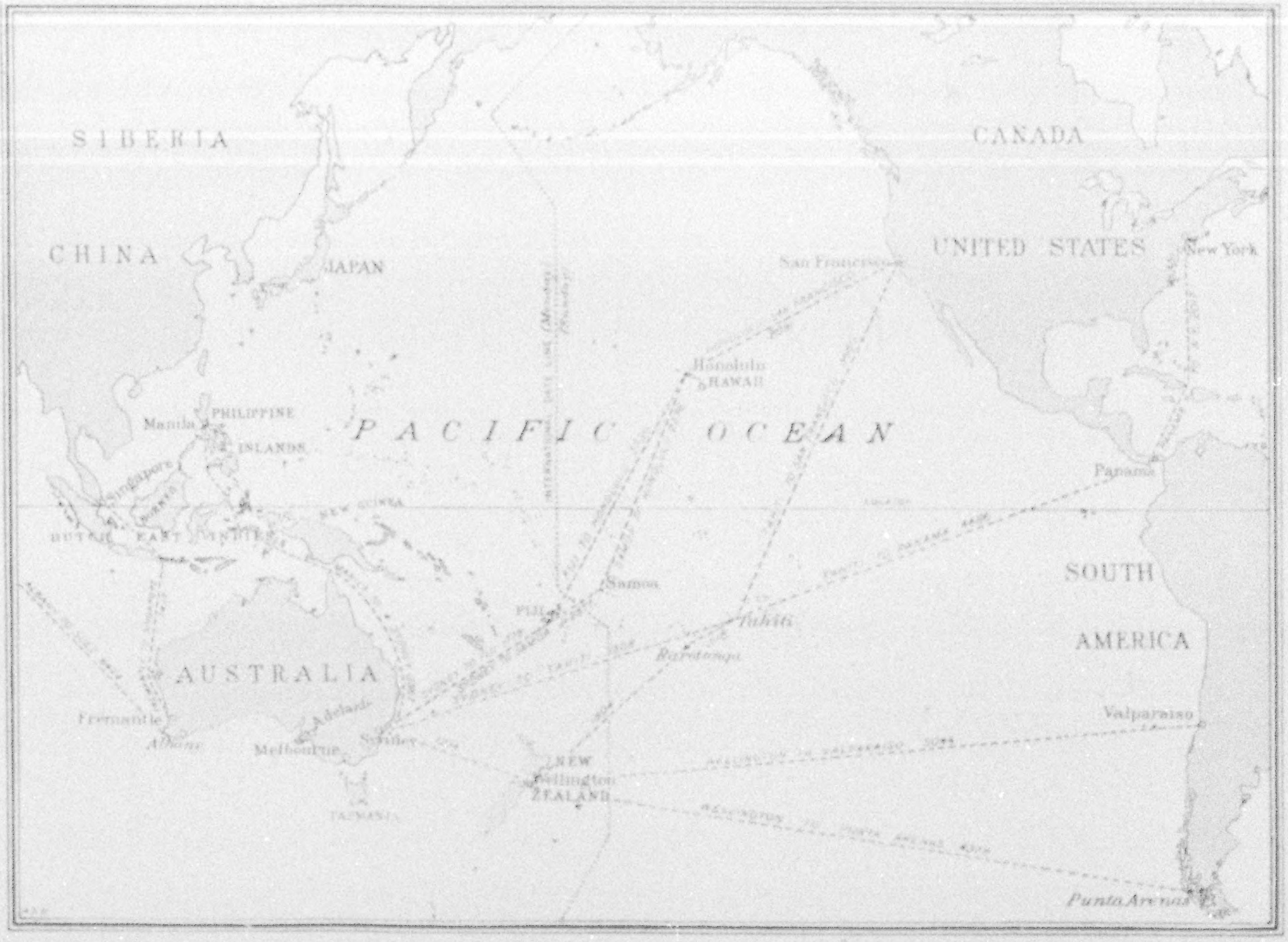
SUNRISE AT PAPEETE

Straight ahead was the long, high ridge of Aorai, culminating 7,000 feet above the tides. Standing at the head of the historic Fautaua Valley, it overlooked La Diademe and lesser heights and guarded a difficult entrance to the innermost recesses of the island.

To its right rose a great crown of nature's fashioning—La Diademe of the French, the Maiauo of the Tahitians. The loftiest of its jutting spurs, which fancy had sculptured into kingly insignia, towered 4,000 feet above the sea and seemed to be covered to its tip with vegetation. Between Aorai and the lengthy ridges to the right was a mighty gap. Through this the Fautaua River cut its way, spilling itself, six miles from the sea, in a cascade more than 600 feet high.

Somewhere beyond Aorai the still loftier Orohena lifted its steepled head. Its sheer walls had baffled all who had attempted to surmount them. Up to a certain distance human feet had trodden; above that only vegetation had found a resting place.

In the foreground, mirrored in a deep and clear harbor that swarmed with marine life of great variety and diversified



MAP SHOWING THE POSITION OF TAHITI IN THE MID-PACIFIC

The completion of the Panama Canal effected a saving of 10,000 miles in the sailing distance between New York and Tahiti.

color, ran a fringe of algaroba trees. Back of them were sequestered avenues of "flamboyant," tamarind, mango, and breadfruit. From these rose an occasional red tile roof, church spires, white flagstaffs, and tall coconut palms.

Sloping gradually from the town, evergreen hills, scarred here and there by barren red and gray clay, extended miles inland, where they overlooked the Fautaua and Punaruu valleys. They were broken into almost innumerable canyons and gullies all over their surface.

FEMININE CHARM IN TAHITI

As the steamer drew near the shore many small craft—the picturesque outrigger canoe, the broad-beamed fruit-boat, and the noisy gasoline schooner—lay at anchor or moved about the lake-like harbor.

At the copra-scented dock toward which we moved, hundreds of Tahitians and scattered pairs and groups of Americans and Europeans were on hand to meet us. It was a variegated throng. There were as many colors and shades of complexion as there were of dress, and some of the feminine possessors were beautifully proportioned and moved with queenly grace. Their dark hair, crowned in some cases with a wreath of the tiare, the flower of love and friendship, hung low on their backs. Their brilliant dark eyes sparkled with good will and merry resolution.

With orbs like these searching his own, no wonder Bougainville was moved to say of the daughters of Otaheite, "The boats were now crowded with women, whose beauty of face was equal to that of the ladies of Europe, and the symmetry of their forms much superior."

The native men at the dock were not so picturesque, collectively, as their brothers whom I afterward saw in the country. The dress of the majority was exceedingly prosaic. The average one among them believed himself to be sufficiently

Photograph by L. Gauthier

THE SACRED MOUNTAIN OF RAIATEA: TAHITI

Mummies of departed kings and queens of Tahiti are deposited in mountains, which then are considered holy. This, one of the most imposing of these sacred mountains, is suggestive of an Alpine view.

Photograph from Dr. Theodore P. Cleveland

"TRADE" ON THE BEACH: SOCIETY ISLANDS

Here are shown two principal products and the freight-carriers of Tahiti. The coconuts are dried for copra; the mountain bananas (feis) form the staff of life for a large proportion of the natives. The burden-bearers protect their heads from the sun by circlets of leaves and flowers.

XUM

Photograph from Dr. Theodore P. Cleveland

SOCIETY ISLAND BELLES TAKING A FOOT BATH

In aquatic sports the Tahitians excel. When they are not swimming and diving they are apt to be found wading in a stream or lying on its banks with their feet dangling in its waters. The mother teaches her babe to swim as naturally, and about as soon, as she encourages it to walk. For these water exercises the natives prefer the inland streams to salt water, probably because the fresh water is cooler.

clad when wearing overalls and a light undershirt, except on Sundays and holidays. In town I saw only a few wearing the brightly colored kilt, the prevailing garment worn by Polynesian males living outside Papeete.

Since I was to remain in Tahiti several weeks, I joined with a Frenchman in renting a house that stood on an old French-Tahitian battleground. Our premises were almost surrounded by a mock coffee hedge, and here grew coffee, bananas, passion fruit, pineapples, tree melons, and other fruits, together with roses and cannas. Around us breadfruit and coconut palms hung heavily with food.

Our neighbors everywhere met us with friendly greetings, and inquisitive, bashful boys and girls peered at us through gate and window. Some of these people were musical. On the back doorstep of an adjoining yard a native woman nightly played "Swanee River" and other familiar compositions on an accordion, and near at hand a busy phonograph reminded us of home.

DANCE MUSIC SUPPLIED BY KEROSENE CAN

On our first night among these people we saw an exhibition of native dancing. In this more life was displayed in one minute by each participant than is usually shown by the ordinary islander in one day. The dance was interpreted by fourteen persons, only one of whom was a man. He provided rapid-fire "music" on a kerosene can, accompanying a brawny young woman, who manifested equal vigor and zeal on a similar vessel. The other members of the company were dancers, with the exception of a tall girl who stood between the drummers and was both director and assistant to the clamorous male.

On a platform in the rear of the hall a band of four pieces played frenzied music like that heard at Mexican bullfights.

The supple bodies of the dancers—clad chiefly in white, with a sash or a ribbon about the waist and a circle of blossoms or leaves on bare head—were automatons of vibration; the next instant they were masses of distorted limbs. Amid it all the sharp-eyed leader twisted and whirled, directing with short, loud cries as she urged or rebuked.

On the whole, the dance was far from graceful. The writhings were violent, and at times the movements of the hips attained the rapid tempo of the music.

EVERY ONE EXCEPT THE TOURIST RISES EARLY IN PAPEETE

On my first morning in Papeete I found that everybody there rises early except the tourist. The capital believes in making the most of the cool hours of the dawn. The market opens at 5.30, the shops remove their shutters thirty minutes later, and the laborer begins work at the same hour.

All this activity, however, is quiet bustle. The only noise is the rattle of lantern-lighted carts driven furiously by native Jehus. These men of the whip love speed, and they insist on getting it, even though the horse they drive looks like a cadaver.

At 11 o'clock, and in some cases an hour sooner, Papeete pauses to take a siesta of an hour or two. During this period all places of business are closed, barring Chinese shops, which keep open uninterruptedly until bedtime.

The most animated moment of the town's daily life begins shortly after its 5,000 inhabitants awaken. The site of this activity is the market square. Sunday is the chief market day of the week. At that time neatly dressed men and women from many parts of Tahiti assemble at the market half an hour before the opening bell clangs its signal.

On the previous day and night, boatloads of feis (plantains) and oranges are laid outside the market building in preparation for the morning rush, and in the Sabbath dawn strings of fish and wagons filled with soil products are hurried to the victualers' stands.

RAPID BUYING IS THE PRACTICE

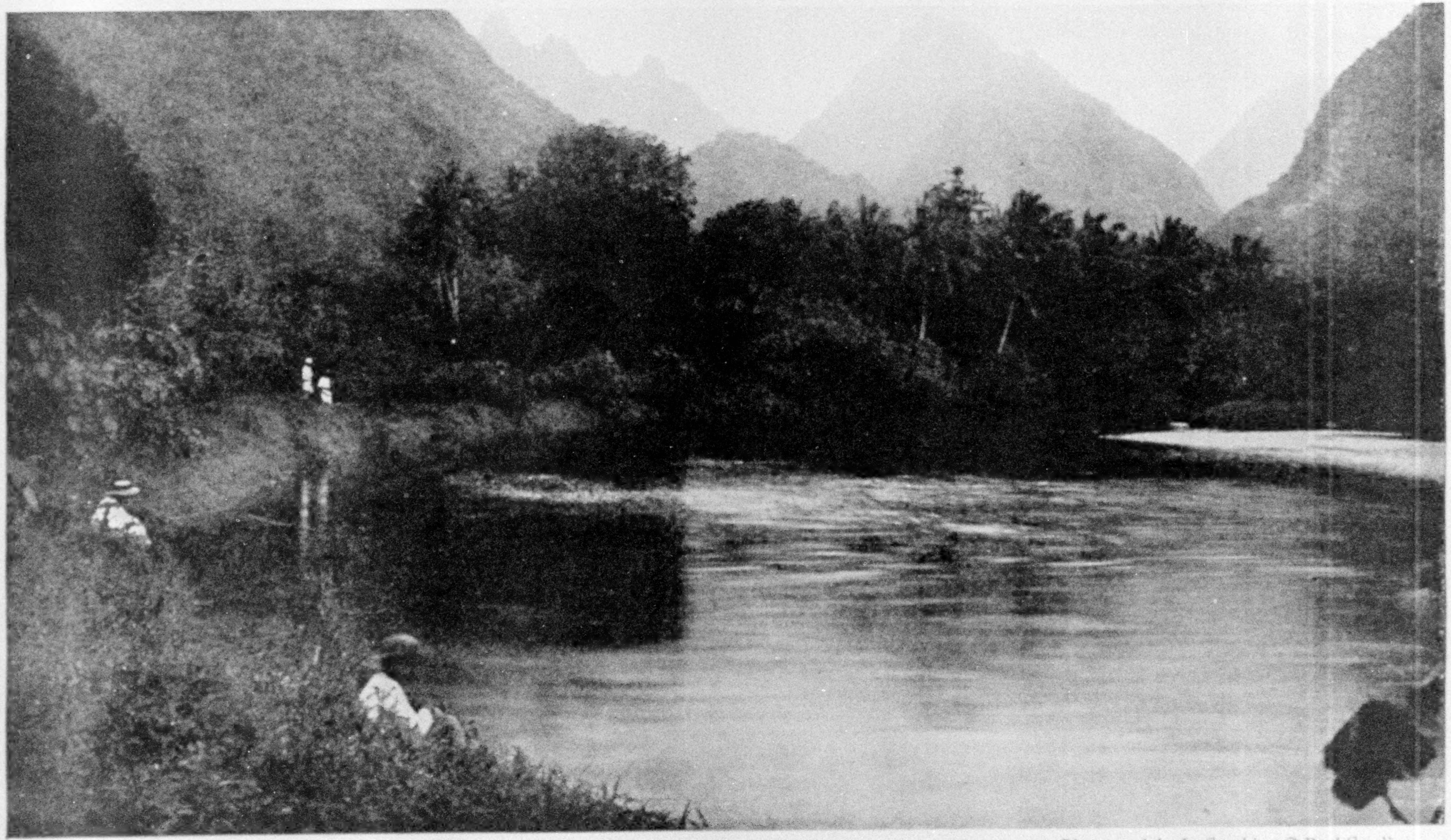
The scene is enlivening; the crowd is friendly and gay. There meet comrades and relatives who have long been separated; there white and brown elbow each other in neighborly fashion.

Within thirty minutes after the first

Photograph from Dr. Theodore P. Cleveland

DINNER TIME IN TAHITI

The native table-cloth is banana leaf. The bowls and plates denote extreme formality. Tahitian food is prepared in a sort of "fireless cooker"—in holes in the ground. Stones first are placed in these holes and a bonfire is built on top of them; then the burning debris is removed and the food to be cooked is placed on the stones.



Photograph by L. Gauthier, © Paul Gooding

MOUTH OF THE VAITAPIHA RIVER, WITHIN A FEW RODS OF WHERE STEVENSON LIVED FOR SEVERAL WEEKS: TAHITI

It was at Tautira, in this vicinity, that Stevenson received the inspiration for "The Song of Rahéro: A Legend of Tahiti," based on an historic incident in the career of the Tevas, the Yaquis of Tahiti in the days of its independence. The rivers of Tahiti have a peculiar beauty because their narrow courses frequently are bowered with the riotous verdure of the banks and their broader expanses usually disclose a mountain background.

Photograph by L. Gauthier

FAUTAUA FALL, MORE THAN 600 FEET HIGH, WITH "THE DIADEM" PARTIALLY SHOWN IN THE BACKGROUND

Scenes like this have given to Tahiti the title of Switzerland of the South Seas. This ribbon-like cascade, indeed, has been compared to the famous Staubbach. The highest aiguille, as the rocky peaks of this region are called, is 3,000 feet above sea-level. Here the natives made a last stand against the French. Here, too, the French retired when they feared an invasion of the island, taking the government records and portable property to this inaccessible haven.

customer is served the fish benches are stripped, and the butchers, bakers, and vegetable men have parted with more than half their stock. In an hour the market is almost deserted.

The buyers have a great variety to select from, there being, as a rule, from fifteen to twenty kinds of fruit, greens, and tubers, and a dozen sorts of fish, much of which is offered in palm-leaf baskets. Mingled with bananas, coconuts, pineapples, tree-melons, alligator-pears, oranges, and limes are gigantic yams, clusters of breadfruit, and piles of taro stacked like soldiers' arms.

THE KILT IS UNIVERSALLY POPULAR

The market square is an excellent place to study Tahitian dress. Of present-day attire there is everything, from the kilt to creased trousers, flashy hose, and flaring waistcoats. In this island fashion usually has few moods; wherefore, in every hamlet are the kilt and the "Mother Hubbard." In the country the first is so well liked that a large number of women spread it over or under their dresses, and men who spend a day away from home in European garb don the prized cloth of red, blue, or yellow as soon as they rejoin their families. Often it and a shirt are worn together. Sometimes the latter is tucked, but more often it is not; and though it may reach well below the knee, like a nightgown, it is just as probable, if the wearer be a boy, that it will barely touch the hips.

The most enjoyable way to see Tahiti is to journey entirely around it. The usual way of encircling it is by carriage or automobile, except at the peninsula's end, where a canoe is necessary. I obtained a guide, Tairua, and walked practically all of the 120 miles.

We began our travels together one pleasant morning, with the home of my guide's father-in-law, in the Papara district, as our day's goal.

Tairua wore a European suit and carried on a stick slung across his shoulder a bundle of clothing wrapped in a kilt. As we were leaving Papeete, he yielded to his love for music by stopping at a Chinese store and buying a harmonica. This he played at intervals all day. His tribute to Apollo illustrated a national trait, for all Tahitians love music. They delight in singing, and from ancient days have drawn sounds from crude bamboo and wooden instruments. Once, as in Hawaii, they even employed the nose to please the ear, the medium in that case being a flute. Sometimes the performer was accompanied with songs, but there seemed to be only one tune, a singularity that obtains to a large extent today.

The favorite instruments now are the accordion, harmonica, and jews'-harp. I saw the first in all parts of the island. In Papeete I frequently saw groups of young persons of both sexes squatting on lawn or street, wreathed with flowers and accompanying an accordion with voice or limb. The harmonica is highly valued by the jovial bands that gather around the rum bottles in saloons, where its strains, combined with the excitation resulting from the liquor, arouse the intemperate circle to wild enthusiasm and boisterous chorus.

Our way lay between coconut groves and banana fields; beside coral-littered beach; in the shade of the flowering purau (wild hibiscus), and past the lowly sensitive plant.

In alarm at our tread, hundreds of land-crabs ran in ungainly fashion to their holes, some raising militant claws, others bending all their energies toward flight. Under our feet tiny ants foraged; in the shallows of the sea the blue otuu fished for its breakfast; farther out brown fishermen poised pronged spears from reef or boat; to the right and to the left the leisurely inmates of thatched homes prepared their breakfasts or sauntered about with an air of luxurious ease. Both young and old among them saluted us with the national "Iorana!" and the curious stared at us with questioning eyes.

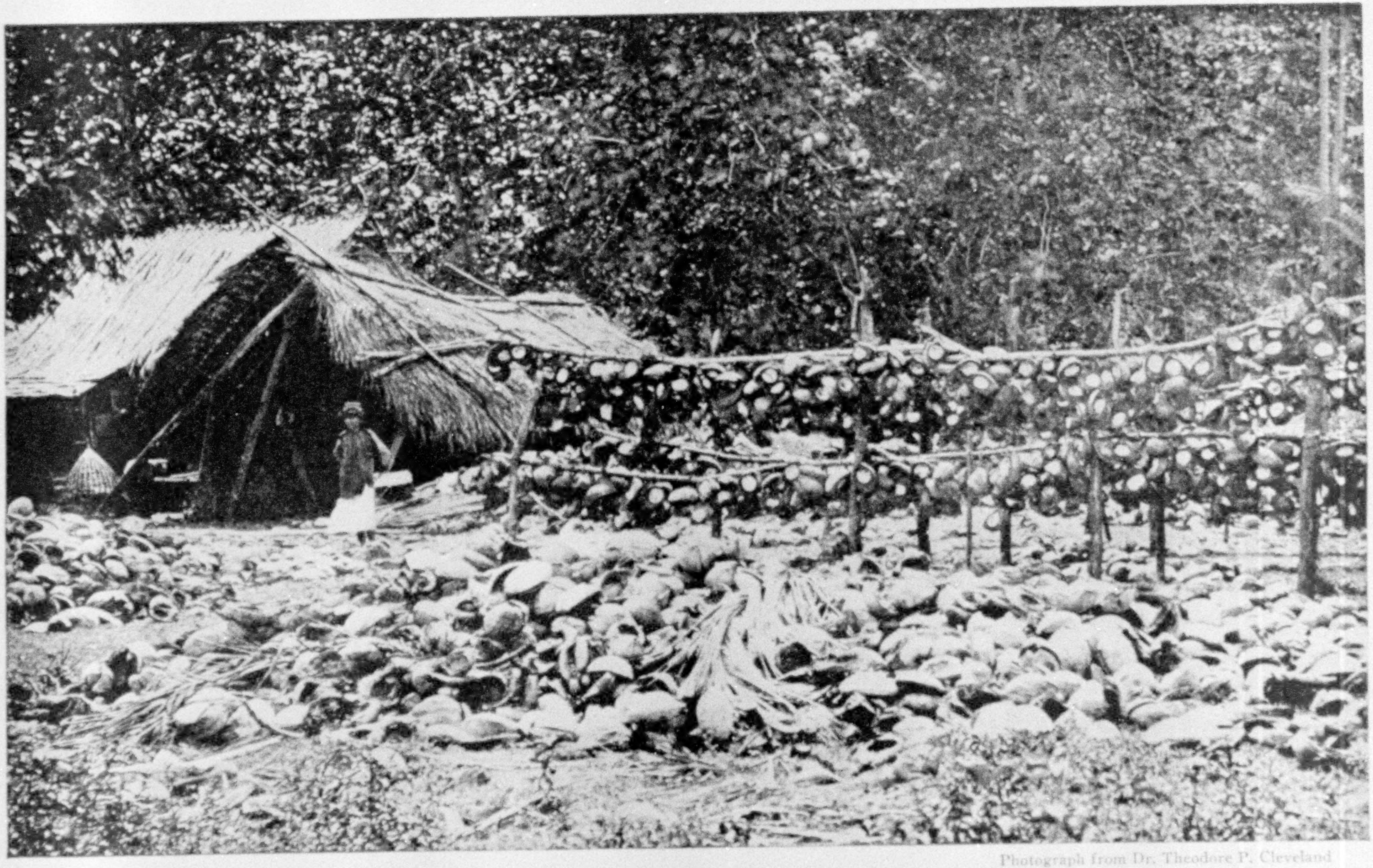
SIGHTS TO GLADDEN THE EYE

As we walked, there was much to see. One moment it was the curling surf thundering on the reef, or an inspiring view of the toothed island of Moorea; again it was flower and tree—the pandanus, the medicinal miro, or the dye-producing eufa. On every hand the breadfruit shared yard and roadside with the prolific mango; over wave-washed shore and high on breezy hill leaned the nut-

Photograph by L. Gauthier

ST. AMELIE VALLEY: TAHITI

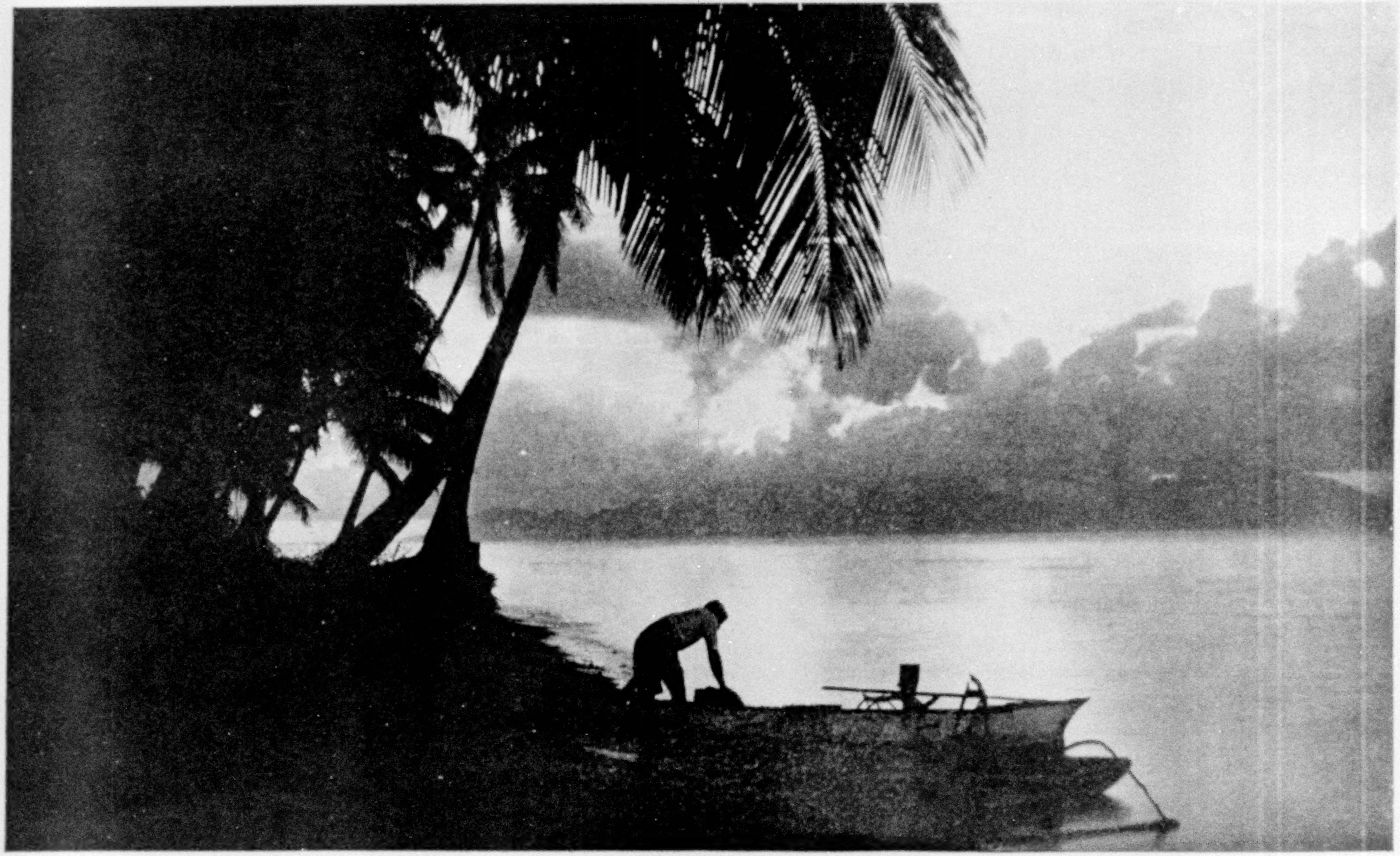
In this beautiful vale is the French powder magazine, and patches of green guinea-grass about it are pasturage places for the cavalry horses. A signal station and a battery of French guns are on the hills beyond. Forty or fifty pounds is no uncommon weight for a bunch of the feis, or mountain bananas, which the native in front is carrying. Small wonder that his shoulders and feet grow hard and callous from his occupation.



Photograph from Dr. Theodore P. Cleveland

THE MAKING OF COPRA IN THE SOCIETY ISLANDS

Great quantities of coconuts are grown in Tahiti for export in the form of copra. After a thorough evaporation the meat of the nut is removed and from it oil is extracted. Copra-making has largely supplanted an older industry, that of vanilla-growing.



Photograph by L. Gauthier

SUNSET IN TAHITI

borne palm; and afar, on mountain slope, branched the glossy fei.

After sundown we experienced one of the greatest pleasures of the tropics—travel by moonlight. When the elements of the air are in a placid mood, an evening stroll is a delight. Waving palms and gently sighing wind, roar of surf on distant reef, and ceaseless wash of tide, combined with pictures of contentment and hospitable greetings of young and old from roadside and dooryard, produce sensations foreign to the most radiant day.

A NIGHT IN A NATIVE HOME

At such a time Tairua reached the home of Matariro. Both the latter and his wife saluted my guide with kisses, and then the whole family sat on the veranda while the long-absent son told of his wanderings in alien lands. I was given the choice of two beds and invited to retire when I pleased. My bed was a comfortable, ample couch, such as I saw afterward throughout frequented parts of Tahiti.

Matariro's home was a one-story, unpainted wooden structure with a balustraded porch. The floor and walls were bare, and the whole was roofed with galvanized-iron sheeting, the usual covering for wooden buildings in the South Pacific.

Until the French occupied Tahiti its people were content to live in bamboo houses with roofs of thatched pandanus or coconut branches, or in dwellings constructed wholly of the two latter materials. The primeval style of habitation is still the more popular with the majority, but in Papeete modernity prevails. In the country, too, in addition to the all-board house, there is a growing fondness for attractive combinations of reed, bamboo, and lumber.

Some of the native owners of homes of European design prefer to live in a primitive structure in the rear and maintain the new domicile chiefly as a mark of respectability and affluence.

CHINESE STORES ALWAYS MARK THE VILLAGE SQUARE

Matariro's residence was within a few kilometers of the straggling village of Papara. Like all other Tahitian villages, it had only one street, and that was part of the island's main highway. On each side of this was an irregular row of houses, the best one belonging to the district chief, in this case Tati Salmon, who is mentioned by Stevenson.

In my tramps in Tahiti I never knew when I had crossed what might properly be called the line between village and plantation. But practically every village center was marked by a group of two or three smoky-looking Chinese stores. Wherever they stood, there was the village square, where the gossipers gathered and, in the harvesting season, the perfume of vanilla beans drying on canvas spread before the open doors, made the place fragrant.

There the native exchanged his coconuts and scented pods for bread and brown sugar and American canned salmon or New Zealand canned butter and beef, and there the traveler was refreshed by coffee or tea, figure-eight doughnuts, and twisted roll.

THE DAILY MENU IN THE TAHITI HOUSEHOLD

In Polynesia hospitality exhibits itself in many novel ways. In Tahiti, for example, the host sometimes spreads a new tablecloth at every meal. When a housewife wants to grace the family board, she goes into the yard and gathers for that purpose a banana branch or a few hibiscus leaves.

When I was called to breakfast at Matariro's I greeted a half dozen persons squatting before a banana leaf on the floor of the back veranda. I was given a small table to myself. As I had said I did not care for coffee, I was served with orange tea and coconut milk. The first was brewed from the leaves of the wild orange tree, and made a pleasant drink. Like the coffee, it was prepared in a palm-thatched kitchen without walls and was served in a bowl.

In common with all Tahitians, my hosts were very fond of coffee and they always had it for breakfast. With it they ate unbuttered bread.

The islanders were taught to eat bread by the Chinese, and so wherever it is possible for a baker's cart to go, coffee and rolls form the morning's refresh-

Photograph from Paul Gooding

NATIVE TAHITIAN GIRL

Even Stevenson grew extravagant when dwelling upon the charms of the women of Tahiti. Here is one traveler's eulogy: "Bridge of nose incurved, nostrils slightly flattened, and lips, if a trifle thick, yet in perfect harmony with pearls of teeth and those deep brown eyes, so sweet and voluptuous without offense! Hair black as ebony, flowing over the shoulders, sometimes tied with a bit of bright ribbon and capped by that wreath; legs bare, feet, too, ankles just lovely. Some are smoking cigarettes rolled in pandanus leaves."

XUM

Photograph by L. Gauthier, © Paul Gooding

THE QUEEN'S BATH, PAPEETE: TAHITI

Poor Queen Pomare, last of Tahiti's recognized royal line, lived simply and wanted only a palace. True, she had one, the Aorai, meaning "cloud of Heaven"; but that Tahitian Potsdam, despite its name, was only a modest bungalow, which might have been taken for a missionary's cottage. Its furnishings were equally plain, made more so in contrast to its one ornament, a portrait of the dusky Queen, said to have been presented to her by Louis Philippe, who had it done from a photograph sent him by a French officer.

XUM

Photograph from Dr. Theodore P. Cleveland

AN APOLLO OF TAHITI IN LIVING BRONZE

The Tahitian's favorite abode is a bamboo hut, preferably built in a grove of palms. When the French administration, for military reasons, compelled residents in the vicinity of Papeete to build in the open, with some regularity with regard to streets, those affected sulked and gradually returned to their old haunts. Now, when the native copra magnate feels his social position demands some display, he often builds in the European fashion, but lives in a "Robinson Crusoe" hut of this type near by. The walls are bamboo sticks, the rafters hibiscus, and pandanus leaves form the roofing. The entire structure is built with the idea not of keeping the rain out, but of letting in the breezes.

ment. At other meals fei, yams, and taro replace the loaf.

As I sat at breakfast on my first day in Papara, I heard a frightful moaning in the front part of the house. I supposed that some one had been hurt or had received distressing news. After the crying had continued without abatement for fifteen minutes, I investigated the cause, and to my astonishment found that the apparent sufferer was an old woman, and that the seeming cause of her grief was my guide, who had been called away while breakfasting. She sat at his side and sobbed piteously on his shoulder. I could not imagine what had led to all this lamentation. It could not have been cruelty on the part of Tairua, for he, wearing a solemn look, had an affectionate arm about the anguished one.

As soon as I got Tairua aside I asked him, "What is the trouble with the old woman?"

"She is my grandmother," he replied. "I been long time away and she come to give me welcome."

KILLING THE FATTED PIG FOR THE PRODIGAL

That morning a pig was killed in honor of my conductor and was to be served for dinner. Thus it is in Tahiti. When the long absent prodigal or favorite son reaches his home again, the fatted pig is slain for him as a mark of esteem.

To this island the porker is what potatoes are to Ireland and the oaten cake to Scotland. Without it Tahiti would be disconsolate and would quickly become a discontented land which only spare-ribs and bacon could restore to bliss. Almost everywhere along its coasts I heard the squeal of this indispensable animal, as, tethered by a leg to a banana plant or coconut tree, it fretfully sought to break its fetters. In the wild, unpeopled hills it enjoyed a roving freedom, but even there was pursued by vengeful foes, armed with formidable spears, who cut it into small pieces and carried these to their homes in bamboo rods.

The hog killed in Tairua's honor was served with yam, fei, coconut sauce, and milk.

My hosts and Tairua ate with their fingers, but I was supplied with a knife and a fork.

Tahitians still have an aversion for artificial aids in eating, for they believe that nothing surpasses their own digits as food conveyors. When Wallis visited the island a native who had been facetiously named Jonathan thought otherwise after he had put on European clothes, and he resolved to elevate himself in society by feeding with a fork. He made a heroic attempt, but every time he strove to establish a connection between the instrument and his mouth his hand encountered his lips, leaving the food poised at his ear.

AT A TAHITI CONCERT

After supper this day, Tairua and I went up the road to hear the local singing society give its weekly rehearsal. Every district in Tahiti has such an association, I was told, and Papara was then more noted than any of the others for choral performances.

The Papara society held its practices in a long, narrow building with open sides and ends and a palm-thatched roof, near the highway. Its members squatted on the ground, with the women in front. Tairua told me that their program included a selection about Adam and Eve and another about the miraculous catch of fishes on the Sea of Galilee. They sang with vim and their unison was excellent.

At times their efforts were marked by a humming and droning something like that of a bagpipe and by high and long-drawn notes. Sometimes, when they appeared to be on the point of ending in a lengthy drone, a sharp crescendo from the leading woman caused an instant revival.

The rapid changes, blending, and sustained efforts were amazing. For a while I was spellbound, but the droning lulled me and with my head on a log I slumbered.

On the second day of my stay in Papara I went on a hunt for fei in the adjacent mountains. The fei is a species of plantain, and it is the island's most valuable article of food. It grows in the mountains and is available at all times of the year. It closely resembles the

Photograph by L. Gauthier

NATIVE TAHITIAN MAN AND WOMAN

". . . Strong is the wind, and strong,
And fruitful, and hardy the race, famous in battle and feast.
Marvelous eaters and smiters."—*Stevenson.*

banana, but its leaves are darker. The fruit is from an inch and a half to two inches in diameter and is borne uprightly on the stalk in bunches that frequently have from 100 to 150 plantains. When ripe, these are a light red or yellow. There are many varieties.

The fruit is boiled or baked for eating, and after it is cooked it is customary to beat it with a stick to loosen its skin and improve its quality.

The fei grows far up mountain slopes, where it can be seen miles away. To get this staple, the woodsman must worm his way up almost impassable steeps, and then down narrow, slippery paths he must descend, weighted with swaying burdens of from 100 to 150 pounds. The sticks on which they are slung bear so heavily on the flesh that they cause toughened lumps to form on the shoulder.

CARE OF CLOTHES CAUSES DEVOUT POSTURE IN CHURCH

The following day being Sunday, I attended services at the Protestant church with my host. We reached the church a half hour too early, yet we were among the last arrivals. At that hour more than a score of women, many wearing black dresses and straw hats of the same color, were seated under a big clump of bamboo, and in and around a Chinese store were thirty more natives of both sexes. The majority were barefooted and all were neatly attired in European clothes.

When they filed into the church, the men and the women sat on separate benches, though not on different sides of the house. About half of them leaned on the backs of the forms in front of them. This caused me to conclude with undue haste that they were very devout. When I learned the reason for this attitude, the aspect of piety I had conjured faded away. These saintly angles did not indicate reverence; they merely betokened laudable efforts to keep the backs of coats and dresses from adhering to planks which had been coated with paint improperly mixed.

The services were opened with singing, which, of its kind, was extraordinary. High aloft in the rear of the building a wonderful flow of melody was poured out by a choir of forty or fifty boys and girls. In the first twenty-five minutes there were five songs. At times the congregation joined, but its good intentions were spoiled by a deal of coughing.

The pastor was one of the most industrious preachers I have ever heard. He spoke for thirty minutes, and scarcely paused an instant all the while.

After the congregation's dismissal, the majority of its members foregathered at the bamboo clump and in the store and its lunch-room. Nearly all of the men and many of the women lighted cigarettes. The Tahitian churchman has his own brand of cigarette, but he is just as ready to accept any other kind. His sort is a small piece of local tobacco wrapped in a bit of the pliable pandanus leaf. Sometimes I saw it passed from hand to hand, like community property, thus affording pleasure to several persons before it became a stub.

Monday morning I bade Matariro farewell, after I had settled my account with him on the easy terms of "pay as much as you like."

Beyond the plantation Atimaono, 25 miles from Papeete, where we paused to see cane fields, a sugar-mill, and 40,000 coconut trees, an enchanting perspective unfolded before us. In the distance rose the ranges of the peninsula, and we passed green hills, pretty bays, and many rivers and creeks flowing between masses of vegetation riotously spreading over swampy lowlands. High over native chestnut trees climbed and rambled the flowering pohue (convolvulus); along the highway an occasional gigantic fern threw out fronds rivaling in length those of the tree-fern; at their roots feathery swords of lesser reach grew luxuriantly, and all around them leaf, flower, and trailing vine covered the earth so completely that only the road showed a barren spot.

Vegetation attained its rankest growth on the shores of Port Phaeton. Here wild hibiscus hung so thickly over the water's edge that, at a distance, only a solid bank of foliage was visible. In this tangle the chestnut and the giant hotu (Barringtonia), the former the prey of ferns and other parasites, cast their

Photograph by L. Gauthier

HOME OF TATI SALMON, HIGH CHIEF OF THE TEVAS, PAPARA DISTRICT: TAHITI

Scion of an old family and head of those ancient fighters, the Tevas, whose tragic story was immortalized by Stevenson, Tati Salmon is noted for his hospitality and for his love of horses and money. His family and that of the late Queen Pomare were friends for generations.

shade; and around them magnificent bunch ferns clung to embowered cliffs and, with other plants, impinged upon the sinuous thoroughfare.

The productiveness of the land was matched by the fecundity of the sea. Oysters covered the rocks of the tide-flats, slugs profusely strewed the shallows, and playful fish leaped bodily from the tidal lakes formed by the intercepting road.

A "BIRD CAGE" HOUSE

The Isthmus of Taravao, overlooking Port Phaeton, is the parting of the ways for the circumambient traveler. Here one road swings round to Maora, another follows the coast to Tautira, and a third leads to Hitiaa and Papenoo.

We took the road to Maora, and that night arrived at the home of one of Tairua's cousins, at Vaieri, on the southern side of the peninsula. She was a doctor, I was told, and with her family occupied the neatest bamboo or "bird-cage" house in the village. It was about twenty feet long and twelve feet wide and its single room was roofed with pandanus.

I judged that there were at least one hundred courses of thatch, or twice as many as in the ordinary palm covering. Each was strengthened with bamboo and reeds and the whole was fastened to rafters of hibiscus with narrow strips of bark from this same tree. The siding consisted of bamboo four and one-half feet high, tied together with hibiscus rope. The door was a mat of palm branches, minus hinges. The floor was a thick carpet of dry grass, partly overlaid with a mat. Inside everything was neatly arranged and scrupulously clean.

The mother spent the evening talking to Tairua and weaving a reed hat, in which occupation she showed her dexterity by handling eleven strips at a time. When I retired for the night I was given the only bed she possessed, and that I might have clean linen, she and her daughter went to a neighbor's and borrowed it.

Tairua was provided with a mattress on the floor and the family slept near him on the floor mat. In the morning I breakfasted with him and his grandmother's brother, in cross-legged fashion before a cloth. The rest of the household ate in the thatched kitchen, which they evidently deemed too common for me.

After breakfast Tairua and I continued to Maora, where we planned to take a canoe the following day to round the coast of Pari. When we sought lodgings for the night we were directed to the villa of Monsieur Toa. Here we were favorably impressed by a supper of chicken, with coconut gravy, beef, fei, rolls, and coffee.

As I sat on Toa's veranda after this meal I heard barbarous yells across the road. They proceeded from a group of boys and girls from six to ten years old, who were giving an impromptu dance. They were in the midst of it when the father of one or more of them burst upon the scene with shouts of disapproval and blows on heads. I asked Tairua why the man should object so emphatically to a seemingly harmless performance.

"Tahiti people don't allow their children to dance," he explained. "I would not let them do so if I had any. It is bad for them. Tahiti children are not allowed to dance until they are eighteen years old or are married."

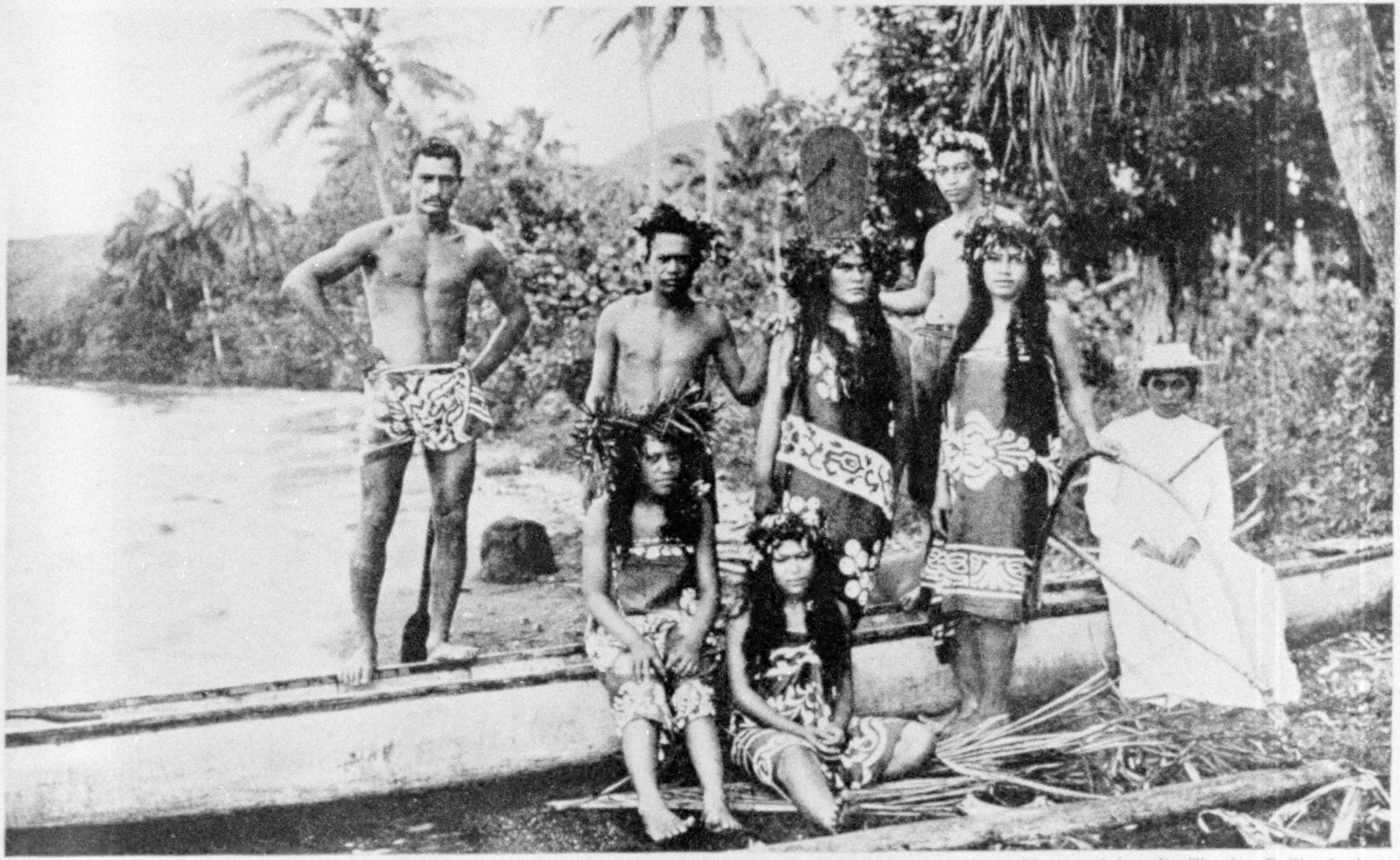
WASPS AND SPIDERS IN THE HOMES

To most persons seeking sweet repose, the presence of two or three hundred wasps and several ferocious-looking spiders in their bedroom would not be conducive to dreamless or visionless sleep; yet it was with just such company as this that my guide and I slumbered in Toa's house that night. When I was about to retire I chanced to look up, and lo! directly over our beds, in the angle of ceiling and wall, clustered two or three hundred wasps.

"Look at that!" I exclaimed with some animation. "We are likely to get stung before the night is passed. And look at those two big spiders. One is almost as large as a crab. Is it safe to sleep here?"

"Ho, ho!" chuckled Tairua. "They will not hurt you. The wasps are there because they are cold and the spiders are afraid of us."

In spite of this comforting assurance, I found it extremely easy to invent pictures of inquisitive winged insects drop-



Photograph from Dr. Theodore P. Cleveland

A FASHION SHOW IN THE SOCIETY ISLANDS: NOTE "CIVILIZATION'S" SARTORIAL CONTRIBUTION TO THE ENSEMBLE

Six feet is the average height of the pure-blooded Tahitian male, a splendid physical specimen, nimble in running and climbing and mighty in rowing. Only the Marquesans compare with Tahiti women, among the South Sea islanders, in beauty of form and face. Especially do these women know the art of simplicity in dress. Their one-piece gowns they dye and stain in beautiful designs, using dyes they concoct from berries and plants. They display their long hair to best advantage by allowing it to hang loosely about their bodies, and crown it with a wreath, sometimes made from plaits of human hair and again of artificial flowers. Even where flowers abound, millinery fashion insists upon an imitation of nature.

ping on the counterpane and engaging in a sparring match with a very unwilling opponent, and I imagined spiders bent on settling themselves snugly in my hair for the night.

I was eager to go round the inhospitable shores of Pari, and at Maora I arranged with Paorai, a native, to transport me in an outrigger canoe to Tautira, on the northern side. He warned me, however, that he might not be able to make the passage if the sea became rough, adding that often he had been forced to return after he had started for the home of Punua, god of rocks and precipices.

At 8 o'clock the next morning we embarked in a fifteen-foot canoe. The day was dulled by clouds, but the scenery we passed was magnificent. All the way mountains approached close to the water and rose to a height of several thousand feet. Every foot of their length they were covered with dense vegetation, from which innumerable feis thrust their long leaves and over which the pohue spread its ornate canopy.

On the sharp summits slender rows of thickly clustering trees stood out so clearly defined as to form a remarkable hedge. Thus one sweep of the eye revealed a foliaged fringe on the skyline, a palm-bordered shore, and a coral rim at sea. Nowhere in all this panorama was a sterile spot discernible, except the scar of avalanche.

DEFEATED BY THE SURF

Near Pari the sea became rougher, especially at the passes, where it rolled in with full force. Off Mitireu we ran into big billows and several times shipped water. Ahead the outlook was still stormier. Soon we were opposite the surf-swept rocks of the abrupt coast and our position became constantly more perilous.

Paorai was a good pilot. He spoke many words of command and caution to his assistant and watched every oncoming swell with riveted eyes. Now and then it seemed that the vaa would be overturned, but the outrigger saved it, though in untried hands it probably would have capsized.

At last the growing fury of the sea led Paorai to abandon further progress, and when we were almost within sight of the cliffs, which rise hundreds of feet and hurl the ocean back into its lawful precincts, he ordered a retreat.

At that moment we faced one of the wildest spectacles I have ever seen. Huge billows rolled incessantly inland. Along the shore the lashing surf flung itself high against the barren rocks and, falling back, was thrown upon the impenetrable barrier again. Ahead, toward a dark horizon, the air was misty with spray, and both there and for miles to our right and rear heaving waters beat themselves into noisy bands of foam as they mounted the coral reef and, partially recovering their momentum there, hurried on to their goal.

MISTAKEN FOR A BOGEY

On our return to Maora I had scarcely landed when, treading a beach path, I met a lad wearing only a shirt. To my amazement, he gave me one frightened look and dashed panic-stricken for his home, yelling with every step. It was the first time I had been mistaken for a bogey, and to me the situation was as amusing as it was terrifying to the child. After that, in less frequented places, I was amused to see youths and maidens race madly through banana and coconut groves with shirt tails flying signals of distress, and all at the mere sight of one whom I have always considered to be a harmless-looking Caucasian.

With the intention of making still another effort to conquer Pari, we went to Tautira, where Stevenson once lived for a few weeks, and thence down the coast by canoe and footpath; but after we had almost reached our lonely destination we were baffled again by billow and precipice.

From Tautira we retraced our steps to the isthmus on our way to Hitiaa. We reached the village late in the afternoon, wet to the skin by a heavy rain.

The most inviting-looking house belonged to the district chief, where, a native told us, "all the white men stop." At our knock the door was opened by the chief himself, and he promptly assured us of supper and a night's lodging. He was barefooted and wore only a pair of overalls and an undershirt, but I saw that

he was accustomed to society, for in one room were three beds and in another was a long dining-table, above which hung a portrait of a former French President.

HIS POSITION AS DISTRICT CHIEF A LIABILITY

After changing our clothing, we sat on the back veranda and chatted with our host. He was young and, as one might reasonably expect of a son so honored, ambitious. In him, however, an ardent desire for power and fame did not burn. In other times he may have been animated by a fire of that sort, but if so it had dwindled to a mere flicker. We received lamentable proof of this when he confided to us that he had no wish to hold the scepter over his 450 subjects. But he had at least one good reason for his unwillingness. His monthly salary was only $15.

Perhaps this would have been enough for his own needs, but, as it was his custom to furnish good cheer to all his visitors without charge, the purchasing power of this sum was decidedly too limited. Instead of his office yielding a profit, it was a constant source of expense to him.

At a settlement beyond Hitiaa, Tairua met some of his relatives who invited us to remain for dinner. We accepted and thus brought death upon another pig. The house where we ate was a wreck. The roof was full of gaping holes and the walls were equally well ventilated. Around the roast nine persons squatted, and with fingers in lieu of cutlery the savory centerpiece was soon reduced to a heap of bones.

Here striking examples of the Tahitian temperament were furnished me by two boys. One, a pugnacious six-year-old, became enraged when his mother took a cigarette from his mouth and reprimanded him. In his wrath he struck her, but, fortunately for him, she was not in an angry mood.

The other lad, who was slightly younger, worked himself into still greater fury through sympathy for his mother, whose face had been blackened in a spirit of fun by the French husband of a native girl. The child became so passionate over this that he yelled with all his power, stamped repeatedly upon his own hat, and finally started for the joker to wreak vengeance. He was held back by his parent, who gave him a beating, but he continued to cry incessantly and to play abstractedly with his toes.

The final stage of my tour was in Papenoo, Tairua's fatherland. This was a rock-forged coast. Its shores were deeply covered with cobblestones, and dark, unyielding stone walls sullenly received the impact of a mighty expanse of ocean unchallenged by projecting reefs.

The home to which we directed our steps was a big bamboo building situated beside a stream, like the majority of Tahitian country homes. I was welcomed at the threshold by Tairua's mother, a tall, stern-featured native, who was smoking a cigarette and wearing a bandage to ease an aching tooth. Shortly after our arrival we sat down to supper on a floor overlaid with hibiscus leaves.

THE MEN OF TAHITI AID IN THE HOUSEWORK

Following this meal we sat conversing until 9 o'clock. At that hour Tairua's uncle offered a prayer, a signal for bed as well as an address to his Creator. There were two beds and I was given the better one. The other was occupied by the married son and his wife, and the remaining sleepers lay on the mat-covered floor. In the morning everybody was up early. And behold! the men helped the women prepare breakfast. They shredded coconuts, pounded coffee, and carried wood and water.

That morning I received an instructive illustration of how the rural Tahitian works out his taxes. This was at once a serious occupation and a comedy. Naturally the workers took the first view and I the latter. These fellows, who were allowed sixty cents a day, calmly sat in the road and placed cobblestones with the deliberation of chess players.

Trust the Tahitian to take life easy. He will never become a nervous wreck from overwork. If anybody in his neighborhood is afflicted with neurotic complaints, the victim is more likely to be the man who tries to make him hurry at his daily toil.

THE MAKING OF A JAPANESE NEWSPAPER

By Dr. Thomas E. Green

THE making of newspapers is an art that, save in its most primitive form, belongs exclusively to modern—indeed, to comparatively recent—civilization. That Japan should, in the very few years since her modern metamorphosis, have so speedily caught up with the van of periodical publication is less wonderful when one remembers that the Orient is the birthplace of the "art preservative," and that China possesses the oldest newspaper in the world.

There have been similar newspapers from remote antiquity in Japan; small sheets roughly struck off from wooden blocks detailing some great political fact, or describing some crime or some generally interesting event.

The first attempt at a modern journal in Japan was in 1864, when the *Kuaigai Shimbun* was undertaken by Joseph Hess, a picturesque character, who in 1850 was cast away in the wrecking of a junk, rescued and carried to America. Here he lived for a number of years, acquired a speedy smattering of western ideas and methods, and, when Japan was opened after the visit of Commodore Perry, returned to his native land as an interpreter.

The first modern newspaper monthly worthy of the name was founded by John Black, an Englishman, one of the first foreign residents of Yokohama. This was in 1872. Since then Japanese journalism has grown with wonderful rapidity, both in volume and in character. There are now some eight hundred newspapers and magazines published in the empire, of which more than two hundred are in Tokyo.

JAPAN'S BEST KNOWN NEWSPAPER IS ONLY 38 YEARS OLD

Of the newspapers there are the *Kuampo,* which is the official gazette, containing the government announcements, such as laws, regulations, and appointments; the *Kokumin,* much quoted in press dispatches from Tokyo, as giving the government opinion of things international during the premiership of Prince Katsura, and the *Nichi Nichi*, as expressing popular sentiment of the better sort.

Of magazines there are scores of every sort and kind,—literary, artistic, legal, medical, scientific — technical along all lines of modern accomplishment and endeavor.

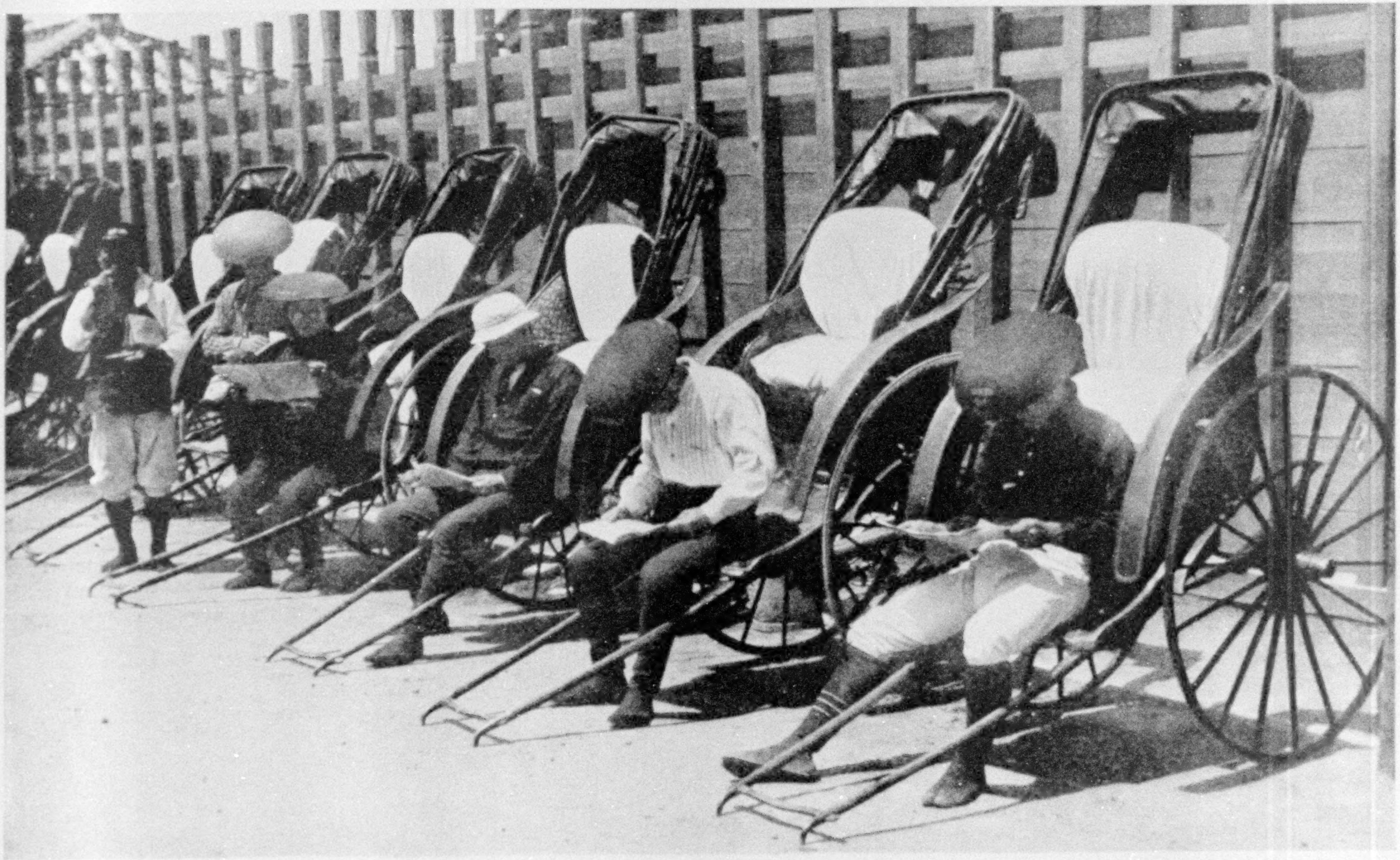
The *Jiji-Shimpo* corresponds in a measure to our words "The Times." Jiji means "timely events" or "daily events" and bears a peculiar, though entirely accidental, resemblance to the Greek "ti-ti," the particle of interrogation. "Shimpo" is the word for journal or merely "paper."

The *Jiji-Shimpo* is a monument, in a way, to the memory of its founder; not more a monument than a constant reincarnation of his spirit and influence. It was founded 38 years ago by the late Fukuzawa Yukichi, who was often called the Japanese Gladstone. No account of Japan, however brief, and particularly no reference to its intellectual and literary development, would be complete without reference to the life and influence of this remarkable man.

Born in 1835 a Samurai—that is, one of the military gentry, for in Japan every gentleman was a soldier and every soldier a gentleman—he was left a young boy, orphaned and poor. Despite the fanatical hatred at that time of all things foreign, Fukuzawa undertook the study of English and made such progress that when the first envoy was sent abroad, in 1860, he was the interpreter and secretary.

On his return he detached himself from all connection with official life and devoted himself to the herculean task of Americanizing Japan, for to him America was always the ideal among the nations.

Dropping his prerogative as a Samurai, Fukuzawa became a commoner and the preacher and teacher of a Jeffersonian type of democracy. He introduced into Japan public speaking and lecturing, for which many of his most progressive contemporaries declared the Japanese lan-



A GROUP OF "RIKISHA" MEN EXHIBITING THEIR THIRST FOR LEARNING, THE UNIVERSAL PASSION IN JAPAN

The Japanese have been termed by some observers the greatest newspaper readers in the world today. As in the United States, the perusal of the day's news is a duty which no one is too lowly to neglect and none too high to scorn. This is in line with their avid quest of knowledge. Especially is the trait evident in the schoolboy, whose eagerness to learn might cause the average American or English collegian to regard him as a "grind." Perhaps he misses some of the valuable lessons of playground and athletic field, acquiring no more in the long run by depending, as does the French student, so largely upon reading matter.

guage unfit. To make it still better suited, he coined new words and phrases to express modern ideas.

He translated western books and wrote original treatises upon social and intellectual reform. His works comprise one hundred and five volumes, of which more than ten million copies have been issued. It is no exaggeration to say that this one man is the intellectual father of more than half the men who are now directing the affairs and shaping the destinies of the island empire of the Orient.

Eventually his work crystallized in two things: the *Jiji-Shimpo* and the other the Keio Gijuku, an institution where a student body of more than two thousand is devoting its time and energy to practical preparation for usefulness—an institution whose modernity is indicated by the fact that it vanquished our own University of Wisconsin at baseball.

EVERY MAN ON THE EDITORIAL STAFF IS A UNIVERSITY GRADUATE

From the time of its establishment, it has been an unwritten rule that the men who compose the editorial staff, indeed that all the men concerned in the making of the *Jiji-Shimpo,* shall be graduates of the university. Every facility is afforded young men whose choice of profession is journalism to prepare themselves while in college for their future work.

The staff consists of an editor-in-chief, who is the general and responsible manager of the paper. Under him are five assistants, who are at the head of as many principal departments. Politics is handled by ten men thoroughly competent to discuss questions of state.

The policy of the paper is independent. It is partisan only in that it is liberal, devoted to progress, and opposed to any retrograde policy in Japanese civilization. In the main, it supports the government as at present organized, and when it takes occasion to differ, it does so with dignified and logical criticism, and not with the hysterical effusions that appear in the "yellow" journals that have developed in Japan as elsewhere.

Because of this scholarly and dignified character, *Jiji-Shimpo* wields a great influence and its voice is potent in shaping and controlling public opinion.

The paper emphasizes its commercial department and a staff of trained men looks after this part of the news.

A foreign department of three editors cares for the cable and telegraph dispatches and keeps in close and intelligent touch with international affairs.

Domestic news is gathered by correspondents in every city and important town of the empire, sifted, and arranged by two editors.

Twenty men compose the city staff and, in close harmony with the reportorial methods of our Occidental papers, cover the local news of Tokyo, a city of more than two million people.

A literary editor and two assistants prepare every Thursday a four-page supplement, covering the literary life and product not only of Japan, but of the world. I saw in a single issue a column and a half review of an economic work that was at the time causing considerable discussion in our American papers, and a lengthy mention of three works of American fiction numbered at the time among our own best sellers.

An art department has four special writers; there are two staff photographers and a caricaturist whose work is as original and as attractive as a shrewd Japanese McCutcheon can make it.

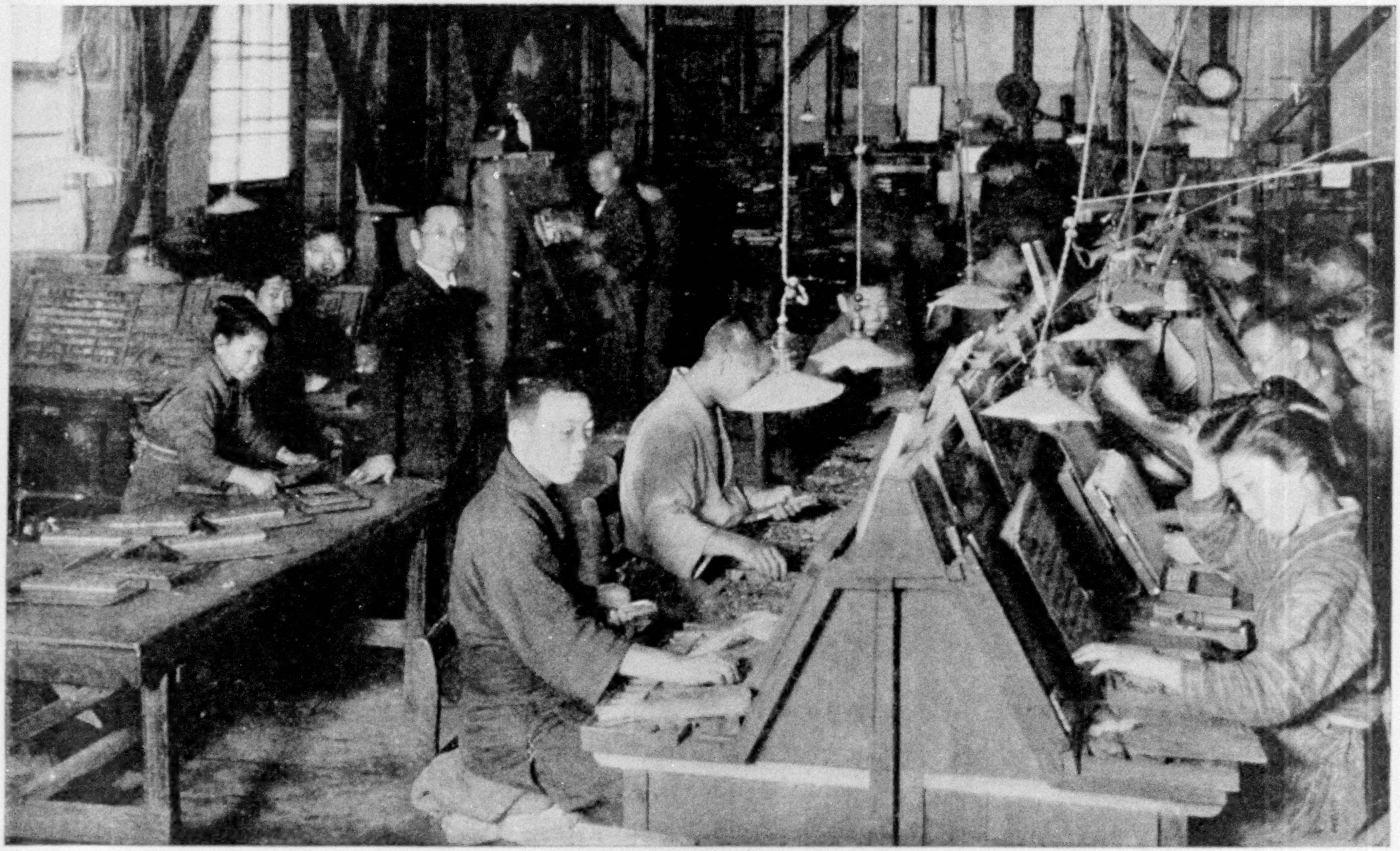
A WOMAN JOURNALIST IN OSAKA

An Osaka department, made up of five men and a woman journalist, look after a special edition printed each day and localized for that city of a million people.

In addition the paper issues a juvenile magazine called *Shonew,* with a circulation of seventy-five thousand, designed for the children of Japan. It is made up of stories, travel articles, games, and puzzles; and an unusual feature is a political section, given over to juvenile review of current issues, with a view to training boys and girls in a practical knowledge of the problems of citizenship. The *Jiji* has a daily circulation of about one hundred and ten thousand.

The *Jiji* is an eight-page paper, with generally a two-page insert, slightly smaller in format than American papers.

In common with all Oriental languages, Japanese is written and printed from right to left, and the title, therefore, is in the upper right-hand corner of what would be for us the eighth page. The

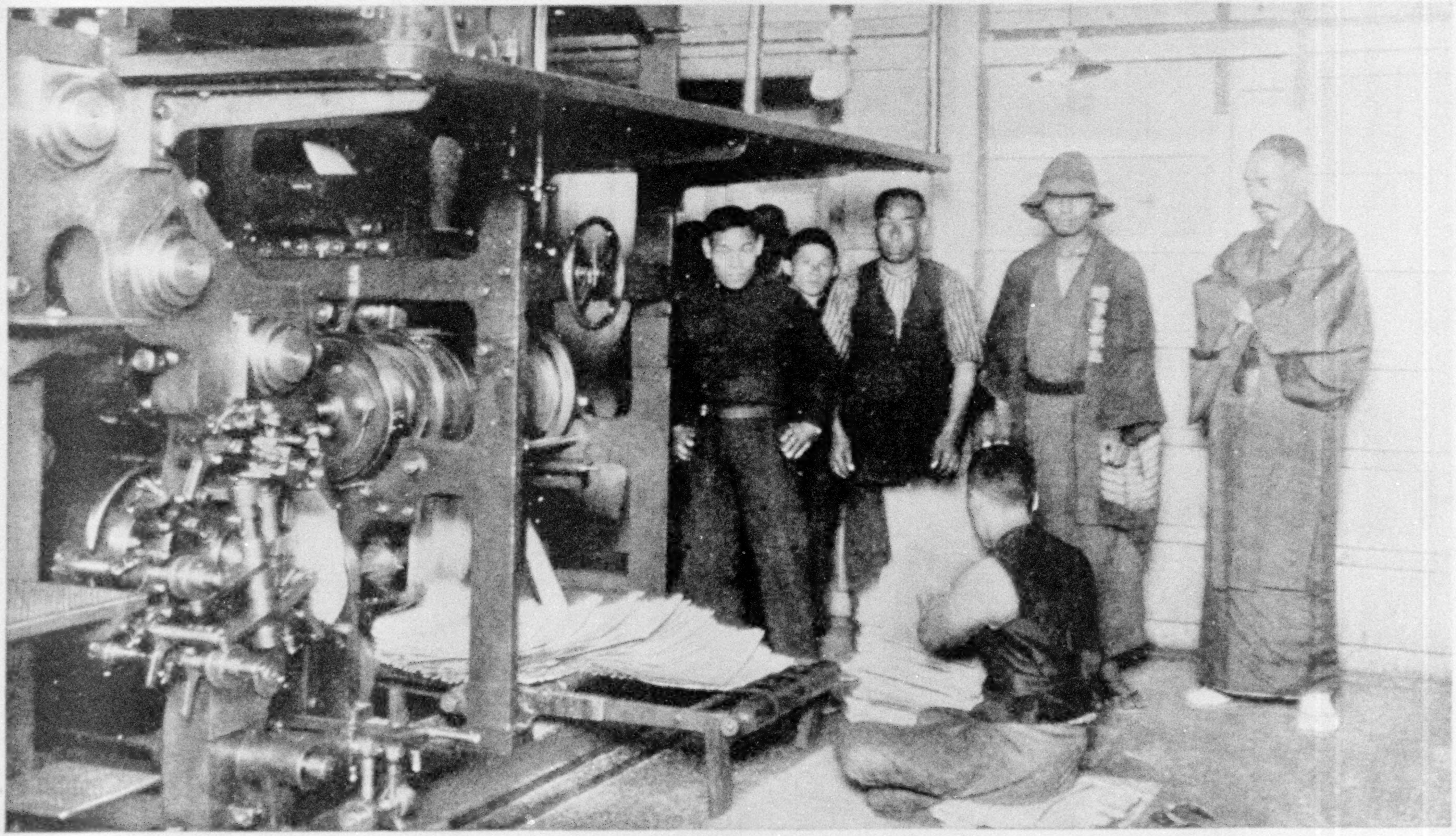


THE MAKING OF A JAPANESE NEWSPAPER: TYPESETTERS ADDING THE "GRASS-TYPE"

"Japanese is printed in two sets of characters—the borrowed Chinese, which are ideographic, each representing a word or a group of words; and side by side with these characters, in their vertical line, runs the translation or explanation in the indigenous grass characters, a sort of phonetic or stenographic script easily read and understood by the common and uneducated people."

THE MAKING OF A JAPANESE NEWSPAPER: CHINESE BOYS PICKING UP IDEOGRAPHIC TYPES

Instead of working before a case of 26 letters, the Chinese compositor must pick his type from thousands of compartments, set all around the room. Usually he has a group of type-collectors working with him. To remember what character they are seeking, they sing it in a nasal monotone. Small wonder that a veteran printer, after professing Christianity, said that he "renounced the service of the devil and gave up printing." Imagine the bedlam of getting out an "extra" in a Japanese composing room.



MAKING OF A JAPANESE NEWSPAPER: THE PRESS

Presses similar to those of the United States are used in Japan, from which come papers printed, cut at the top, bottom, and sides, folded, pasted, and counted. Since the Japanese papers usually have fewer pages than ours, a speed of printing as high as 300,000 copies per hour is possible.

XUM

A BASEBALL NINE FROM THE TOKYO GRAMMAR SCHOOL

The Orient dislikes innovation and avoids physical exertion. Hence the deeper significance of younger Japan's wholesale pursuit of two American sports, baseball and tennis. Japan is distinctive among eastern peoples for its aptitude in adopting ideas of other lands.

lines of print are vertical and read from top to bottom and from right to left. Each article is in a small square surrounded by a border.

TWO KINDS OF TYPE FOR EVERY STORY

Typesetting in Japanese is a tedious and laborious piece of business from an Occidental viewpoint, though the many hands employed make it rapid enough in an Oriental sense. Japanese is printed in two sets of characters—the borrowed Chinese, which are ideographic, each representing a word or a group of words; and side by side with these characters, in their vertical line, runs the translation or explanation in the indigenous grass characters, a sort of phonetic or stenographic script easily read and understood by the common and uneducated people.

When an article or editorial is ready in manuscript, it is sent first to the ideographic composing-room, where it is divided into "takes" and given to Chinese compositors. The room is filled with closely set racks, containing the thousands of varieties of ideographic type.

Each compositor goes from rack to rack looking for the character required. That he may not forget what he is looking for, he sings it over and over audibly, in a cracked, nasal sort of sing-song. A composing-room is anything but a quiet place, resembling the chorus of a Chinese theater.

When the article is finished, it is placed in a sort of galley, tied together and sent to the real compositors, who untie it and proceed with a pair of tweezers to place the small grass type beside the ideograph characters. This work demands scholarship of a high order, for it requires not only an accurate and exact knowledge of orthography and language, but general information in regard to the subjects discussed, that the multi-meaning characters may be interpreted.

The type thus completed is proved, the proof carefully read and corrected and taken then to the imposing stones, where it goes into the make-up of the paper.

All typesetting is of necessity hand work, as the peculiar character of the language precludes the use of a linotype.

Stereotyping and press-work are along the ordinary lines required for the Hoe perfecting machine, from which the paper comes, folded and counted as in one of our own establishments.

The day's work is similar to our own. The editorial department begins activities about eleven in the morning and its work is completed by five in the afternoon. The typesetters are at work by eight. The business offices are open from ten to ten.

The first edition is on the press by eight, in order that it may catch the night trains for provincial circulation. The city edition goes to press at 1 a. m.

Advertising rates are comparatively cheap—on the ordinary pages fifty sen; on the title and editorial pages up to eighty sen a line, a sen being practically half a cent. The subscription rates are only fifty sen per month.

CORRESPONDENTS IN WORLD'S GREAT CITIES

Before the World War, the *Jiji* paid its editor-in-chief three hundred yen a month ($150)—but, compared with the cost of living in the two countries, that was the equivalent to more than double the amount in America. The assistant editors receive two hundred; a good reporter one hundred; an ordinary one from fifty to seventy-five.

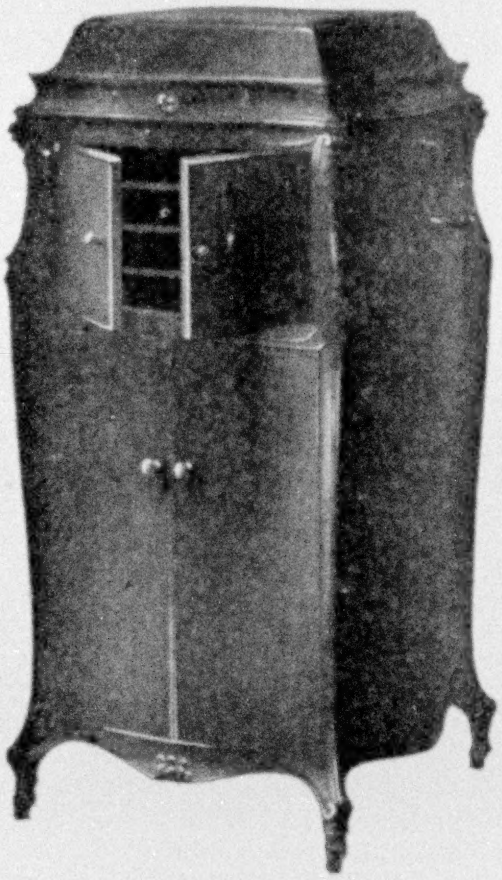
Chinese compositors were paid five dollars a week; the phonetic compositors from ten to fifteen. Stereotypers and pressmen were paid from five to eight dollars a week. Since the war all wages have advanced about 50 per cent.

The paper has a staff of correspondents in most of the capitals of the world—Washington, London, Paris, Berlin, Vienna, and in each of the great cities of the Orient.

It uses cables and telegraphs quite as regardless of cost as does the average western paper, and any great event, wherever occurring, will, within a few hours of its happenings, throw an army of shrill-voiced newsboys on the streets, crying "Gogwai! Gogwai!" "Extra! Extra!"

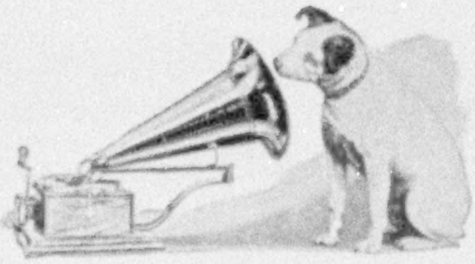
The photographs of the offices of *Jiji-Shimpo,* made for me, through the courtesy of the editor-in-chief, by the staff photographer, are of unique and vivid interest, and tell in a graphic way the story of the making of a Japanese newspaper.

The one instrument that plays Victor Records perfectly



That instrument is the Victrola. It is specially made to play Victor Records, and similarly Victor Records are made to be played on the Victrola. No combination of substitutes will enable you to hear the great artists of the world as they themselves have chosen to be heard.

Victrolas $25 to $1500. New Victor Records demonstrated at all dealers on the 1st of each month.



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Victor Talking Machine Company

Camden, New Jersey

"HIS MASTER'S VOICE"

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This trademark and the trademarked word "Victrola" identify all our products. Look under the lid! Look on the label!

VICTOR TALKING MACHINE CO.
Camden, N. J.

XUM

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One of the great hotels of Pershing Square

Under the Direction of JOHN McE. BOWMAN, Pres.

DIRECT INDOOR CONNECTION WITH THE GRAND CENTRAL TERMINAL

"Get off the train and turn to the left"

GEORGE W. SWEENEY, VICE-PRESIDENT AND MANAGING DIRECTOR

WITH all its magnitude, its beauty, and the luxury of its most modern facilities, the fame of the Hotel Commodore is built on its sincere and unusual personal service to the individual guest in New York.

This service does not confine itself to perfect rooms and board; but responds to the world of natural human needs and desires of the stranger in a great city.

33 stories, 2,000 outside rooms and baths.

With the other Pershing Square Hotels, The Commodore is only a few steps from Fifth Ave., in the heart of the fashionable shopping district, close to the theatres, clubs, libraries, music and art exhibitions. Surface cars and elevated at hand. Direct indoor connection with subways to all parts of the Metropolis.

Other Hotels in New York under Mr. Bowman's direction:

The Biltmore
Adjoins the Grand Central Terminal

Murray Hill Hotel
JAMES WOODS, VICE-PRES.
A Short Block from the Station

The Belmont
JAMES WOODS, VICE-PRES.
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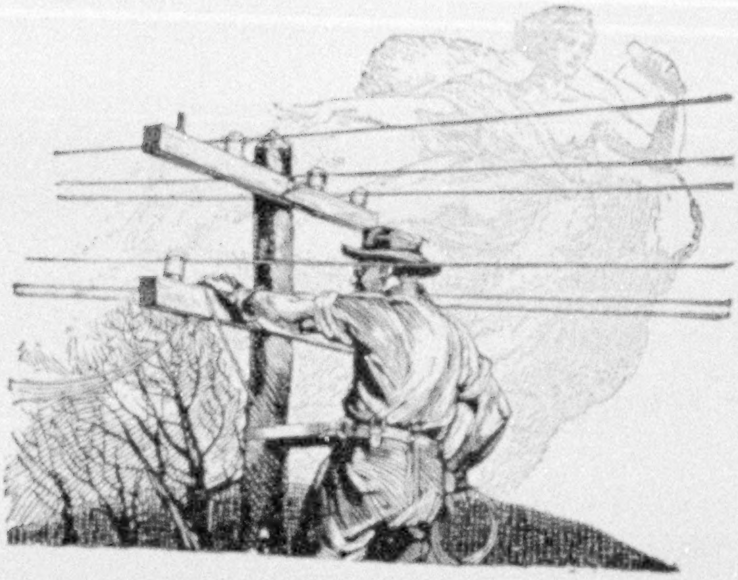
EDW. M. TIERNEY, VICE-PRES.
Broadway at 73rd St. In the Riverside residential section

PERSHING SQUARE HOTELS, NEW YORK



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OUR book, "Men and Bonds," giving information on the following subjects, will be sent gladly on request:

Why we handle only carefully investigated investment securities.

The wisdom of purchasing securities from a Company large enough to maintain far-reaching investigation service.

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How 10,000 miles of National City Company's private wires keep our offices in leading investment centers of the country in constant touch with our New York headquarters.

Your advantage in dealing with a Company whose representatives talk with an average of 3,000 banks a day.

Why these sales representatives are especially qualified to helpfully discuss your individual investment needs.

For a copy of this book, address our New York office, asking for AN-139.

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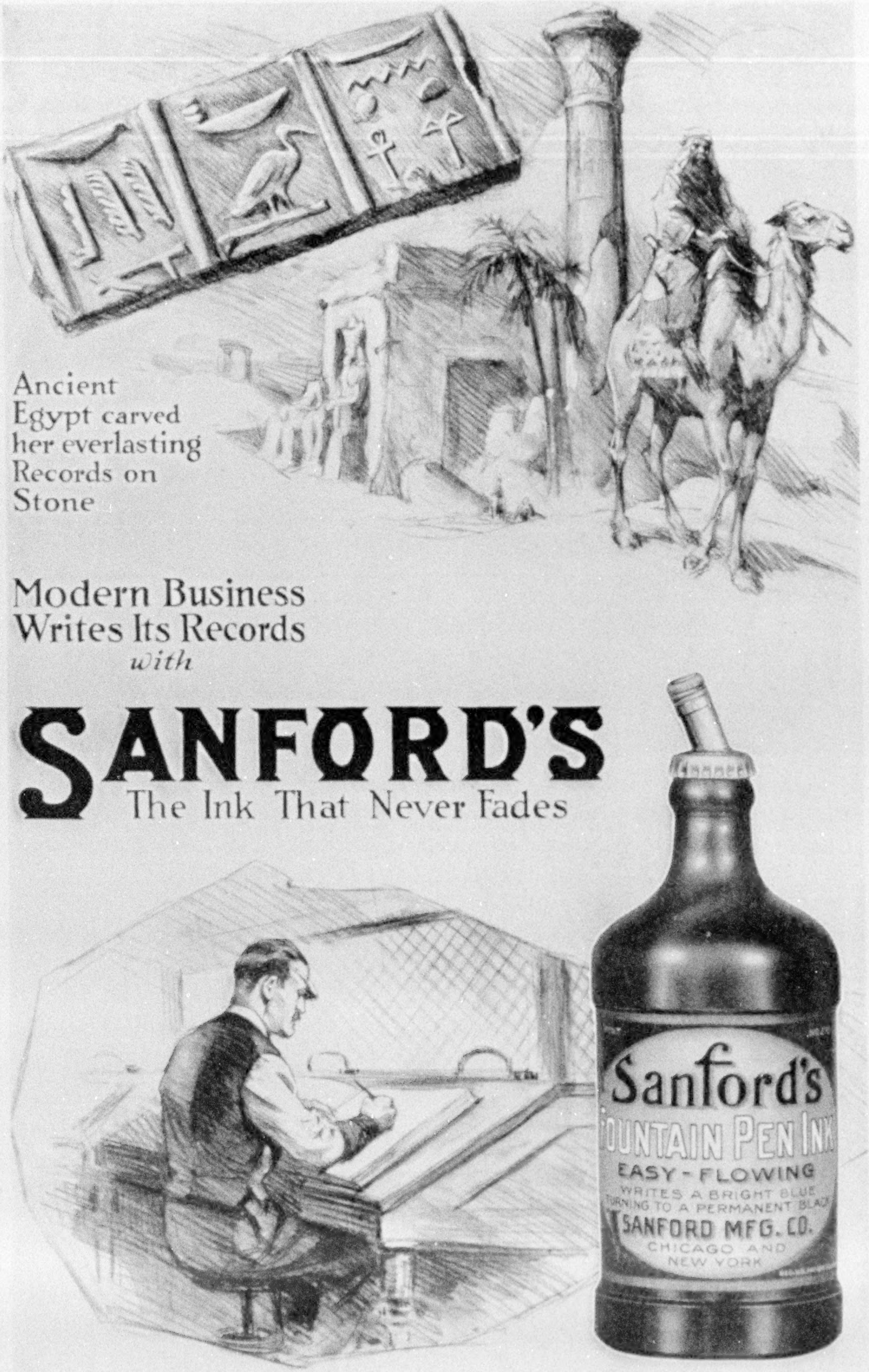
Ancient Egypt carved her everlasting Records on Stone
Modern Business Writes Its Records with
SANFORD'S
The Ink That Never Fades
Sanford's
FOUNTAIN PEN INK
EASY-FLOWING
WRITES A BRIGHT BLUE TURNING TO A PERMANENT BLACK
SANFORD MFG. CO.
CHICAGO AND NEW YORK

Will you have to carry your loved ones through a burning building before you will *Act?*

He did a real job, then, of investigating

HE flung them from him as if they had been pigmies. His was the strength of love—that greatest love that a strong man feels for but one person—his mother.

Through smoke and flames he fought his choking way until at last he found her helpless there on her bed. How he managed to carry her out through that inferno, he never knew; for when it was all over he realized only the anger that had gripped him as he staggered out with his precious mother, leaving behind those who had called him in vain.

Gone from his mind were all the impressions he had had of this wonderful hospital when he had consigned his mother to its care—its famous surgeons—its modern equipment—its deft, clear-thinking nurses.

"Who builds hospitals with fire-traps in their basements and attics? Who camouflages them with a few tiled rooms and safe-looking walls of brick and stone with treacherous fire escapes?

With the energy that had brought him success in his every undertaking, he investigated. For a time fire protection was his hobby. And he learned the truth—the greatest truth in fire protection. With a Grinnell Automatic Sprinkler System in a building any fire that starts will at once put itself out through the agency of its own heat. He found that no matter when or where a fire starts, the water from the Sprinkler overhead will start, too,—that, day and night, their faithful mechanical firemen will watch and work as no human can.

Read—*"Fire Tragedies and Their Remedy"*

You can find out just what he found if you will send to us for the booklet "Fire Tragedies and Their Remedy." It points out why schools and hospitals are called safe even though they burn and burn and burn. When you have read it you will want to do what this man did. See to it that the hospitals and schools of your city are made safe by automatic sprinklers. Address Grinnell Co., Inc., 293 West Exchange Street, Providence, R. I.

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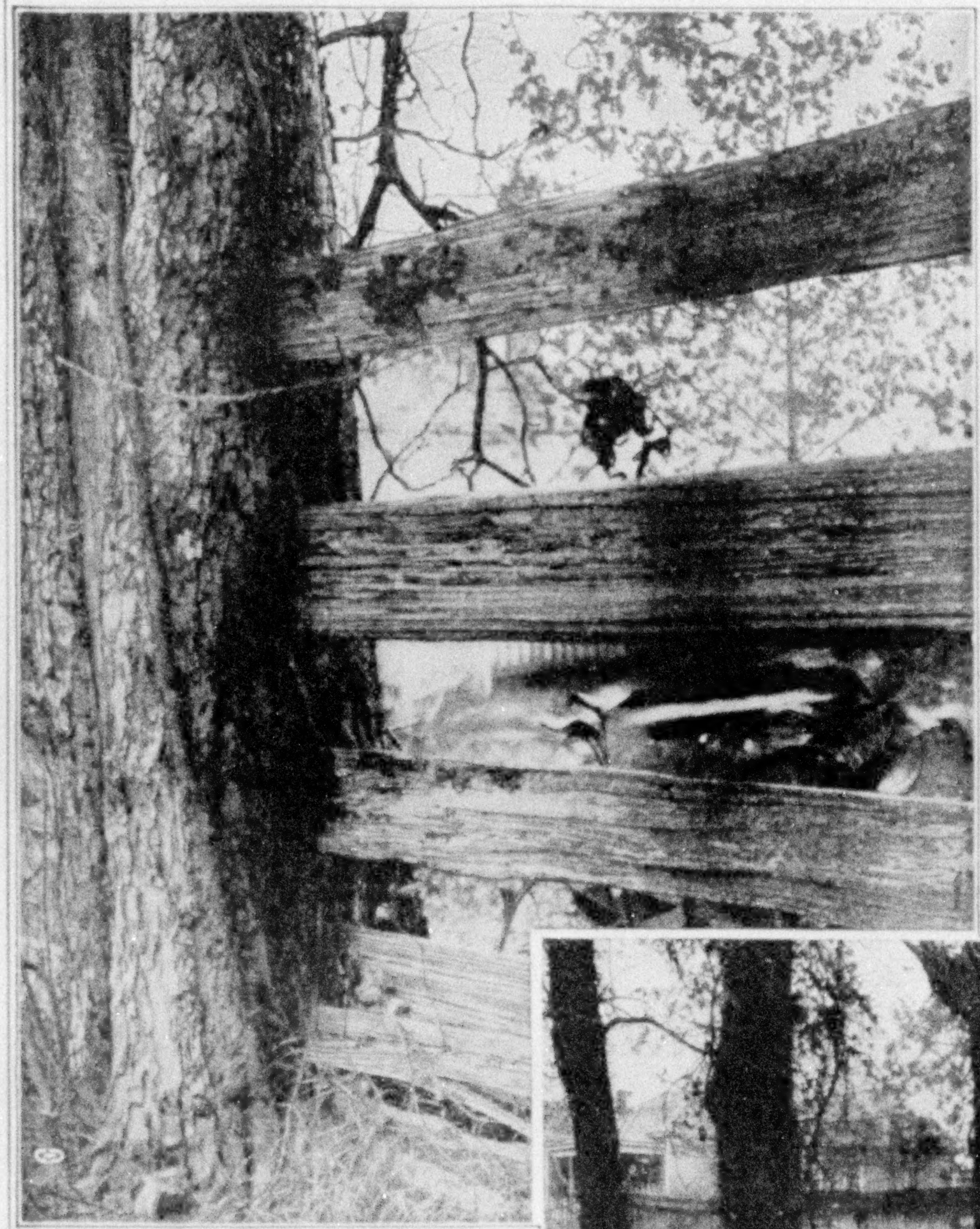
Complete Engineering and Construction Service on Automatic Sprinklers.
Industrial Piping, Heating and Power Equipments. Fittings, Pipe, Valves.

GRINNELL AUTOMATIC SPRINKLER SYSTEM—***When the fire starts, the water starts.***

XUM

Does Cypress *"The Wood Eternal"* *Last?!*

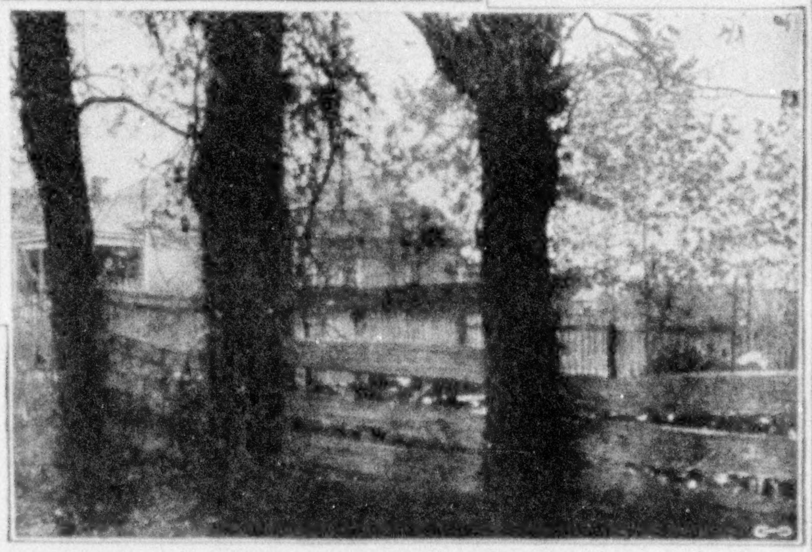
Study These Photographs of an "Ingrowing Fence"



WITHOUT A NAIL OR A PEG IN IT.

Below is a glimpse down a country highway ("de big road," as Uncle Remus called it) near Monroe, Louisiana. That fence has no posts. It was built by forcing split Cypress boards between saplings. This occurred so many years ago that nobody knows when it was, nor who was the labor-saving genius who did it. Then the trees grew, and grew, and grew.

NOW, PLEASE, study the larger photograph and see in detail how the fence looks today. Note the size of the tree, and how deeply are embedded the ends of those old Cypress rails—no one can tell how deep they extend in. Note, also, how weathered they are, yet they ring as true and sound under a hammer as though just hewn. Were those old Cypress boards somebody's money's worth? Why should not YOU do as well with *your* lumber money—whether you are building a beautiful home or just patching up the old place? (USE CYPRESS.)



"THE PROOF OF THE FENCING IS IN THE LASTING."

"Build of Cypress Lumber and You Build but Once."

Let our "ALL-ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service with Reliable Counsel.

SOUTHERN CYPRESS MANUFACTURERS' ASSOCIATION

1224 Hibernia Bank Building, New Orleans, La., or 1224 Heard National Bank Bldg., Jacksonville, Fla.

INSIST ON CYPRESS AT YOUR LOCAL LUMBER DEALER'S. IF HE HASN'T IT, *LET US KNOW IMMEDIATELY.*

In 1644 the first American "public school" was established at Dedham, Massachusetts.

THE same spirit that prompted the first law enjoining free public education in New England, established Harvard College in 1636, Yale in 1700, and other schools of higher learning at early dates. Today more than $50,000,000 is represented in these institutions, with endowments considerably in excess of that amount.

But it is the little red school house that has contributed most to the general knowledge and prosperity of the people. Indeed, the present high percentage of literacy in New England may be directly attributable to the lessons instilled by the stern *New England Primer* of colonial days—lessons that led to an early appreciation of the value of culture and intelligence and of the community's responsibility for furthering education.

While thus ministering to the intellectual needs, New England has also steadily progressed in the commercial world. The Old Colony Trust Company, an institution reared in this spirit of New England initiative and vision, offers every advantage for financial and trust service of the highest order.

We shall be pleased to send you our booklet *"Your Financial Requirements and How We Can Meet Them"*, outlining our facilities in detail. Please address Department D.

Plan to visit New England during her coming Tercentenary celebrations.

OLD COLONY TRUST COMPANY

BOSTON

"Mention The Geographic—It identifies you"

XUM

House at Belmont, Mass. Stanley B. Parker, Architect, Boston

NATURE alone is responsible for the qualities that make White Pine such a good home-building wood.

The smooth, even grain that makes White Pine easy to work and permits close-fitting joints—its long life when exposed to the most rigorous climate—its freedom from warping, splitting and opening at the joints—are due to the peculiar characteristics that Nature has given the wood.

WHITE PINE

We especially recommend White Pine for use on the outside of the house, for three centuries of home-building in this country have brought out the fact that no other wood so successfully withstands exposure to the weather.

White Pine costs a little more than other building woods, but the prudent home-builder will find the slightly added cost a sound investment because of the added life White Pine will give to his house, and its elimination of repair charges.

He will have the satisfaction also of having his house for many years to come as fine in appearance as the day it is completed.

WHITE PINE BUREAU,
1006 Merchants Bank Building, St. Paul, Minn.

"White Pine in Home Building" is beautifully illustrated with old Colonial and Modern homes, full of valuable information and suggestions on home-building, and gives a short, concise statement of the merits of White Pine. Send for it now. There is no charge for it to prospective home-builders.

Why Teeth Stain

You leave a film-coat on them

All statements approved by high dental authorities

Most teeth are dimmed more or less by a film. Smokers' teeth often become darkly coated.

That film makes teeth look dingy, and most tooth troubles are now traced to it.

Millions now combat that film in a new, scientific way. This is to offer a test to you, to show the unique results.

You must end film

The film is viscous—you can feel it with your tongue. It clings to teeth, enters crevices and stays.

Ordinary brushing methods leave much of this film intact. So millions find that well-brushed teeth discolor and decay. You must attack film in a better way, else you will suffer from it.

It is the film-coat that discolors, not the teeth. Film is the basis of tartar. It holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay.

Millions of germs breed in it. They, with tartar, are the chief cause of pyorrhea.

Efficient ways

Dental science, after painstaking research, has developed effective ways to fight film. The world's highest authorities now approve them, after careful tests.

These ways are combined in a dentifrice called Pepsodent. And leading dentists everywhere now advise its daily use. A ten-day tube is being sent to everyone who asks.

Watch these new effects

One ingredient is pepsin. One multiplies the starch digestant in the saliva to dissolve the starch deposits that cling. One multiplies the alkalinity of the saliva to neutralize mouth acids as they form.

Two factors directly attack the film. One keeps the teeth so highly polished that film cannot easily cling.

Pepsodent has brought a new era in teeth cleaning. It fights the tooth destroyers as was never done before.

Send the coupon for a 10-Day Tube. Note how clean the teeth feel after using. Mark the absence of the slimy film. See how teeth whiten as the film-coat disappears.

You will always brush teeth in this new way when you watch the results for a week. Cut out the coupon now.

Pepsodent PAT. OFF. REG. U.S.

The New-Day Dentifrice

A scientific film combatant combined with two other modern requisites. Now advised by leading dentists everywhere and supplied by all druggists in large tubes.

478

10-Day tube free

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Mail 10-Day Tube of Pepsodent to

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Only one tube to a family

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Shawknit

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Vantine's

The Oriental Store

Fifth Avenue and 39th Street, New York

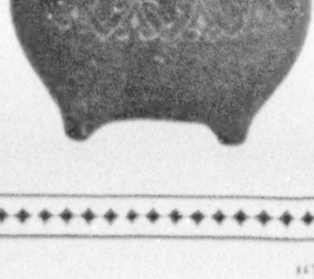
Japanese Brocade Hand Bags

SPECIAL PRICE, $10.00

War Tax, 25c.

These attractive Bags with the Vantine allurements are made in the new smart shallow shape. Colors, Navy and Gold, Navy and Silver, Black and Gold, Black and Silver. Handles and frames covered with Brocade. Inside beautifully lined with silk and fitted with suspended purse and mirror.

(Mailed direct on receipt of price)



Incense Burner

$7.50

A beautiful piece of Bronze, of rich color, artistically inlaid with silver. The cover is a basket effect, silver plated; size, $3\frac{3}{8} \times 4\frac{1}{4}$. Price, $7.50.

Basket of Tea

$1.50

A delicious Formosa Oolong Tea, sealed in a tin canister and packed in a fancy Chinese basket (useful after the tea has been used); $5\frac{1}{3}$ oz. Price, $1.50.

Only time for
Grape-Nuts
—that sturdy appetizing
cereal, always ready,
always satisfying.

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The Lands of Magic

The magic of temple bells; of idols & lacquered pagodas; bazaars, heavy with perfumes of sandal wood & spices; of vivid Oriental crowds; of pyramid & sphinx & desert—all call you to

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Tours *Round the World*—Eastbound or Westbound—leaving in the fall. Tours to *Japan-China* through the winter.

AFRICA

Autumn tours to *Algeria & Tunisia*—transplanted countries of the Arabian Nights. Also tours to *Egypt & the Nile*.

Other tours to *South America, California, Europe.*
Cruises to the *West Indies.*

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A clean tooth never decays—the Pro-phy-lac-tic keeps teeth clean

Your Dealer now has

COLGATE'S

"HANDY GRIP"

PATENTED 1917

The New Thrift Shaving Package

THIS new way of packaging the already popular Colgate's Shaving Stick has several advantages which no other shaving soap gives you.

1 You get a year's supply—at least—all at once. No more being "out of soap" when you want to shave. And the "Thrift Package" costs less than three "Handy Grip" Shaving Sticks.

2 You get the economy of the "Handy Grip" Stick, which enables you to use every bit of your soap—and saves the purchase of a new metal box with each stick of soap. The Refills screw in as did the original stick.

3 You will probably get the habit of using the stick, which is the most economical form of shaving soap. We can tell you this *impartially* because we make Shaving Powder and Cream as well as Sticks.

4 It is more than likely that you will also form the habit of shaving with Colgate's. When you do, you will be once-for-all free from mussy "rubbing-in" with the fingers, as we have advertised since 1903. You will also learn the truth of the saying, "Lather with Colgate's and shave with Comfort."

COLGATE & CO. *Est. 1806* New York

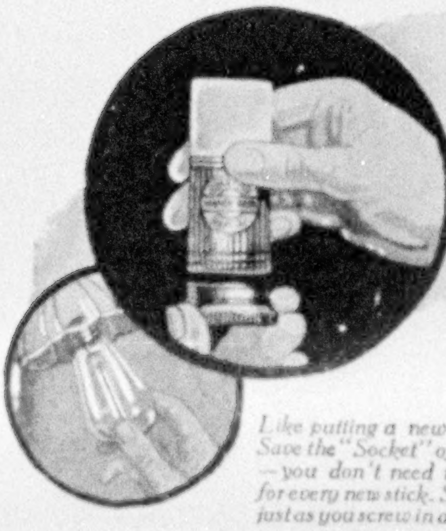
Convenience - Economy

One "Handy Grip" complete

Two Refill Sticks to fit Grip

80¢

Shaving Comfort for a long time



Like putting a new bulb in a socket. Save the "Socket" of your Handy Grip—you don't need to buy a new one for every new stick. Screw in a "Refill," just as you screw in a fresh electric bulb.

XUM

A Garden Full of Darwin Tulips for $2.00

In anticipation of again placing before our customers a collection of Darwin Tulips we have had a sufficient quantity grown so that we can offer

50 Giant Darwin Tulip Bulbs, Finest Mixed, for $2.00

selected from fifteen named varieties

Few spring flowering plants rival the Darwin Tulip for brilliance of bloom. Borne on strong stems often exceeding three feet. They are a wonderful addition to the flower garden.

Plant any time before the ground becomes frozen, and they will bloom from the middle of May to Decoration Day.

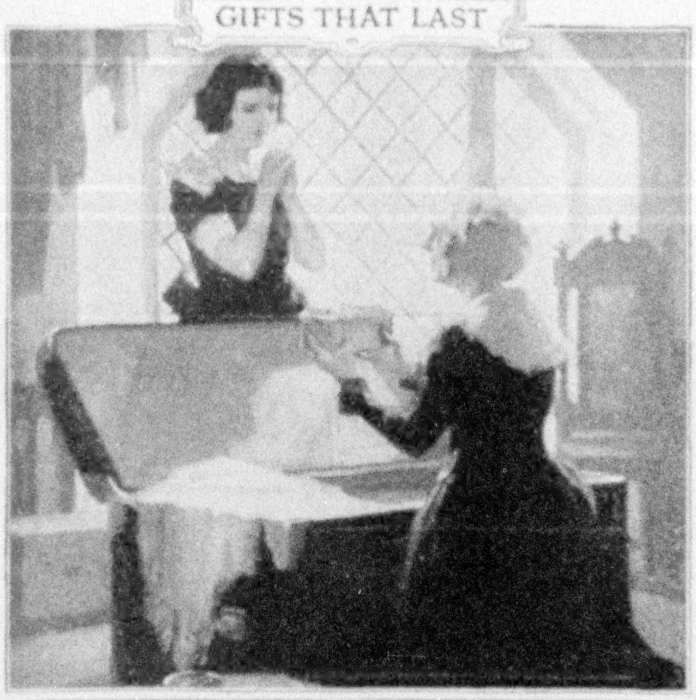
Mail this advertisement with check, money order, cash, or stamps, and secure this exceptional collection, sent prepaid to any point in the U. S. east of the Mississippi. **For points West and Canada, kindly add 25c. to cover cost of delivery.**

Our 1920 Fall Bulb Catalogue sent on request.

Stumpp & Walter Co

30 and 32 Barclay Street New York

GIFTS THAT LAST



MEMORIES

FADED with age are the laces in the ancient treasure chest. The bridal veil is a filmy ruin. Time has dulled the silken lustre of the wedding gown of long ago. A faint hint of fragrance lingers like the ghost of orange blossoms. Dead are these treasures of dead yesterdays. But hallowed by the sentiment that inspired it, the gift of jewelry remains in beauty untouched by the years—memory's radiant heirloom of the happiness of bygone days.

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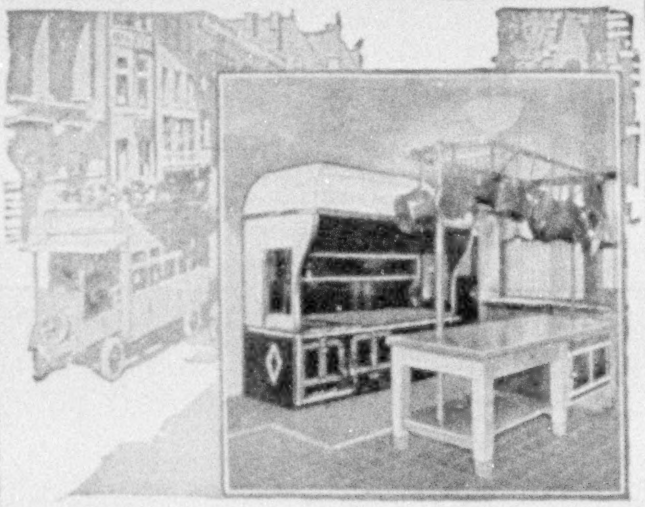
DIAMONDS · PEARLS · GEMS · JEWELRY · WATCHES
CLOCKS · SILVERWARE



Sanitary Cooks' Table and Coal and Gas Range built for Adolph Lewisohn, New York. C. P. H. Gilbert, Architect.

Deane Kitchen Equipment

A present-day necessity. This sanitary cooks' table, built of heavy maple and Knoxville marble, provides a plate-warmer and overhead saucepan rack. *Deane Kitchen Equipment* includes every device needed for better kitchen service.

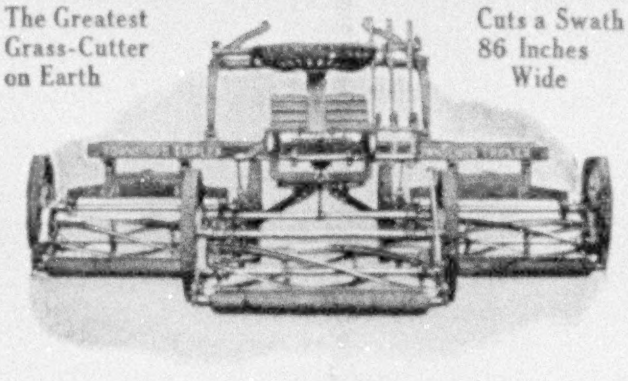
Ask your architect to specify *Deane Kitchen Equipment* and send for our portfolio, "The Heart of the Home."

BRAMHALL, DEANE CO.
261-263 West 36th St., New York, N.Y.

TOWNSEND'S TRIPLEX

The Greatest Grass-Cutter on Earth

Cuts a Swath 86 Inches Wide



Floats Over the Uneven Ground as a Ship Rides the Waves

One mower may be climbing a knoll, the second skimming a level, and the third paring a hollow. Drawn by one horse and operated by one man, the TRIPLEX will mow more lawn in a day than the best motor mower ever made; cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horse-drawn mowers with three horses and three men.

Does not smash the grass to earth and plaster it in the mud in springtime, neither does it crush the life out of the grass between hot rollers and hard, hot ground in summer, as does the motor mower.

The public is warned not to purchase mowers infringing the Townsend Patent, No. 1,209,519, December 19th, 1916.

Write for catalog illustrating all types of Lawn Mowers.

S. P. TOWNSEND & CO.
254 Glenwood Avenue Bloomfield, N. J.

VALOUR'S MEED

The world's greatest war is over and won. Of those brave young Americans who answered the call to battle so loyally, some have returned to their homes and their tasks; and some will remain forever in Flanders fields.

In fitting tribute to their splendid valour, cenotaphs solely commemorative of their deeds are being planned by communities everywhere. And for such memorials, it is natural that ROCK OF AGES, the beautiful and enduring gray granite which is the finest of American monument materials, should be given preference.

A descriptive booklet on request.

BOUTWELL, MILNE & VARNUM CO.

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Quarries at
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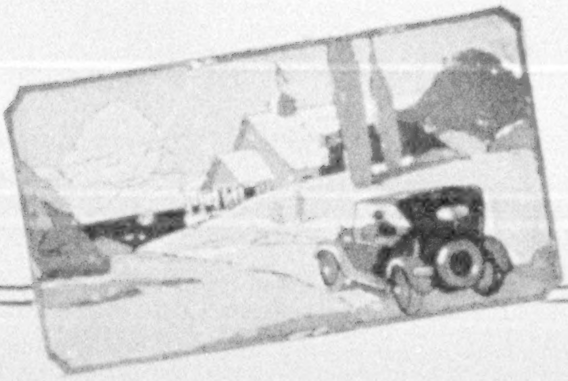

Gas is high; motortravel expensive.

You cannot reduce the cost of fuel —but you *can* bring about a decided saving by increasing fuel mileage.

The New Stromberg Carburetor does it. Effects a positive reduction in fuel costs by adding mileage—producing power plus and assuring additional speed wherever and whenever desired.

Write for complete facts. Be sure to state name, year and model of your motor car.

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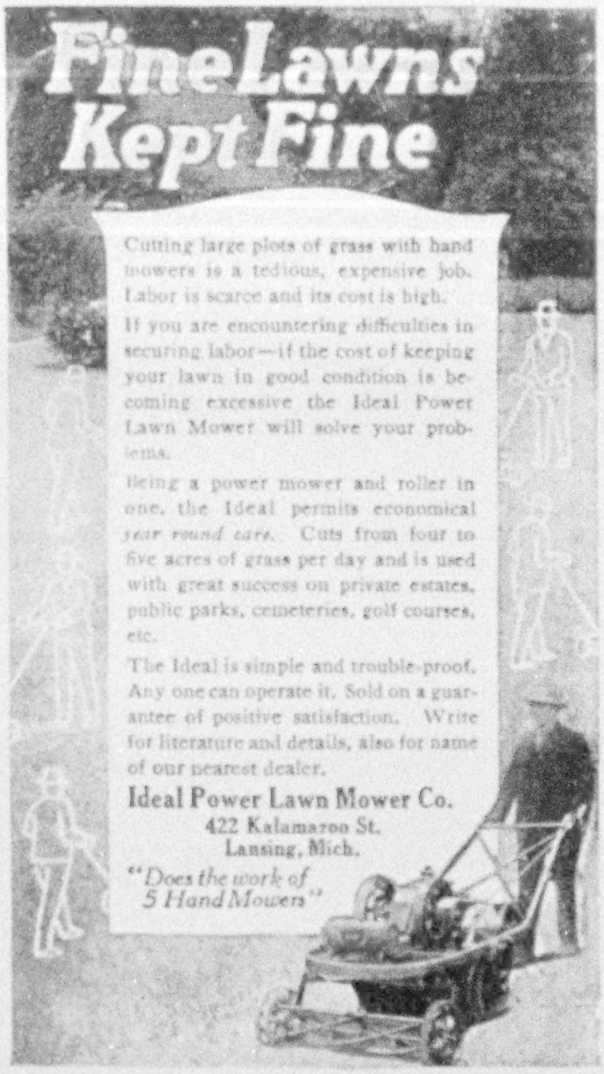
New STROMBERG Does It! CARBURETOR



"Meet Mr. and Mrs. Furry Four-Feet and the Cubs"

Wild Animals of North America

By EDWARD W. NELSON, Chief, U. S. Biological Survey

177 Paintings in Full Color by Louis Agassiz Fuertes

THIS wonder book, beloved of Roosevelt, is a key to Nature's wonderful American "Zoo." It enables adult and child or hunter and photographer to identify the scurrying bit of fur or large animal he glimpses in woodland, meadow, or water as surely as do labels on the enclosures in city parks.

AND then, Mr. Nelson, the friend of all animals and deep scientific student and observer, with facile pen, lets us into the innermost secrets of these First Citizens of the Continent. From squirrel, mole, and field mouse to carnivorous Alaska Bear, he tells which are friends and to be trusted, which are enemies, and gives a new sense of the intelligence and instincts of Nature's four-footed tenants-at-large.

THE magic brush of Mr. Fuertes not merely has caught form and color, but portrays the very character of his subject.

INVALUABLE to teacher, camp director, men and women who love outdoor life, sportsmen, and the children, who never tire of this story-telling Noah's Ark, in color, half-tone, and fascinating text.

Buckram or flexible Khaki, $3.00, postpaid in U. S.

The Book Your Reading Table Needs

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Dept. H, National Geographic Society, Washington, D. C.:

Enclosed find $.......... for which send.........copies WILD ANIMALS OF NORTH AMERICA.

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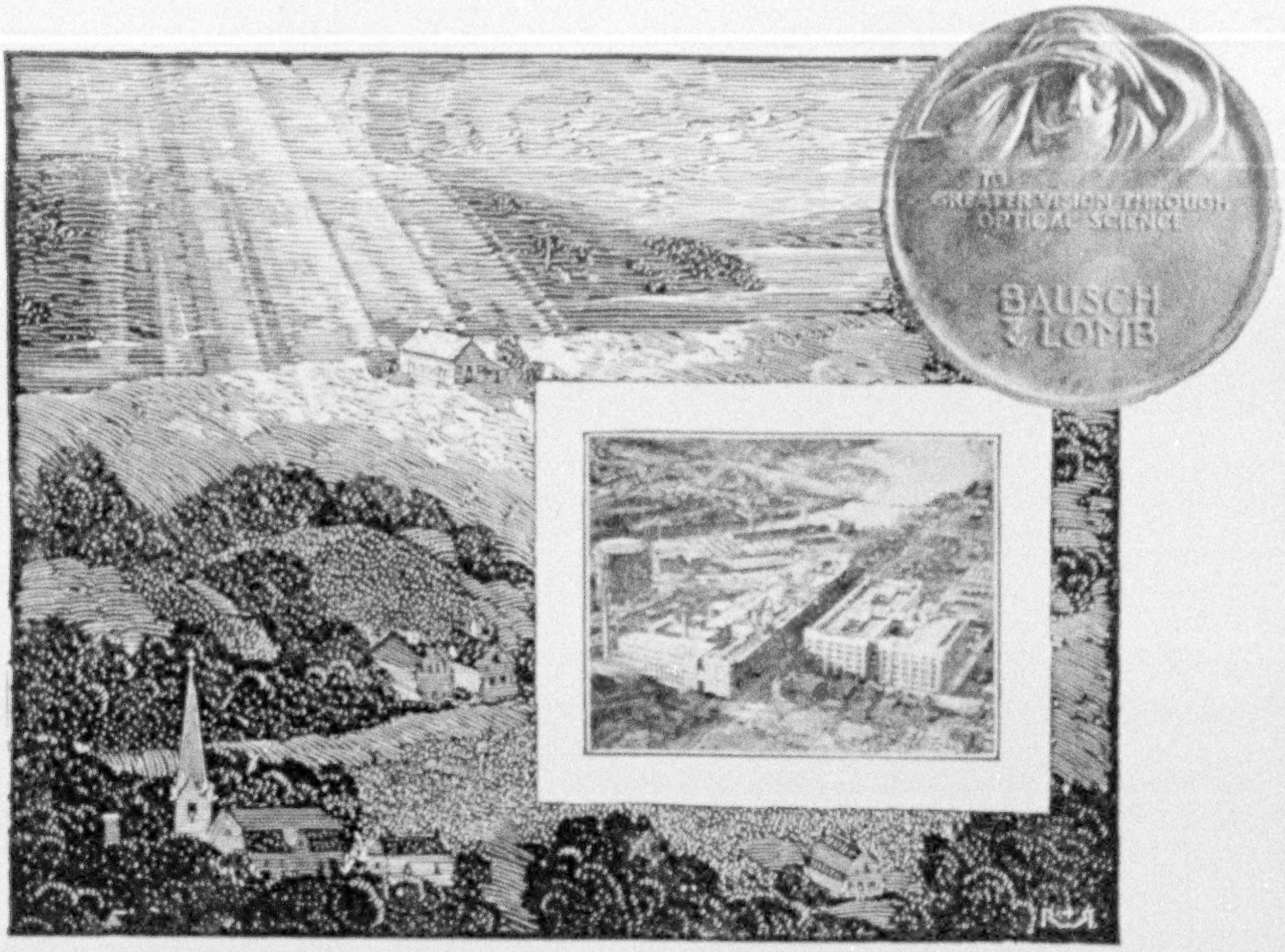
(10-20) Obtainable only from the Society's Headquarters



Grown Great Through Service to Mankind

FROM a tiny room to the titan plant pictured above—that is a far, far span. This is the story of the house of Bausch & Lomb, the story of great growth through great service.

Nearly seventy years ago John J. Bausch dedicated himself to the task of making glasses "that human eyes might see better and farther." Obscure, maimed, in debt, he struggled through long, unrewarded years, upborne alone by his undeviating resolution to succeed through work done worthily.

Today, through the house he founded, the activities of Bausch & Lomb cover the world-wide field of optics.

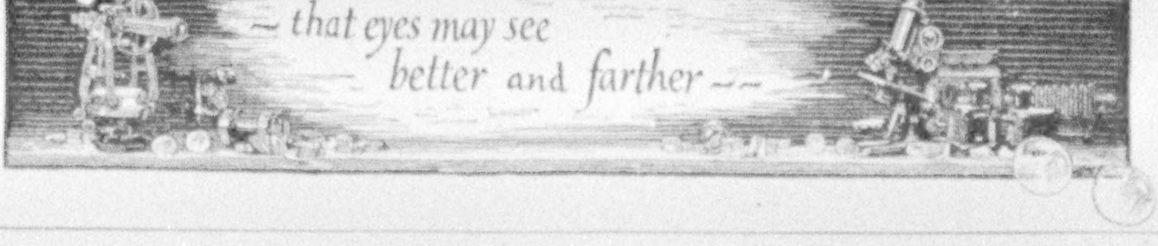
Through their Microscopical Apparatus Science discovers atomic, destructive myriads, and devises means for man's protection; through their Ophthalmic (eye) Lenses is done mankind's service in preserving man's most precious sense; through their photographic and photomicrographic lenses world and atom, nature and man are unerringly recorded; through their projection lenses and apparatus the wonders of the earth are vividly portrayed on countless screens, while their giant light reflectors flash wide assurance across the deep.

It is with a frank humility that Bausch & Lomb speak of these achievements in the field of optics. We recognize that such growth has been permitted us only by reason of that spirit of service through faithful, worthy work and the helpful co-operation of our scientific friends in the professions and trades which has tirelessly continued since John J. Bausch toiled in his little shop. That spirit is today our most greatly prized possession; and it is a spirit which we pledge ourselves to maintain in that wide field of optics where our leadership has been won.

Write for literature on any optical product in which you are interested

BAUSCH & LOMB OPTICAL COMPANY . . . ROCHESTER, N. Y.

Makers of Eyeglass and Spectacle Lenses, Photographic Lenses, Microscopes, Balopticons, Binoculars and other Optical Instruments.



Camel Cigarettes

—a statement

CAMEL cigarettes are the result of years of practical experience in the manufacture of tobaccos of superior quality. Our ambition was to produce the most delightful cigarette possible to make.

Hence, it is intensely gratifying to us to state frankly and without qualification, *that*

Camels superb quality, mildness, mellow body and refreshing flavor have never been equalled by any cigarette in the world at any price!

Appreciation of very unusual and very superior tobacco quality becomes keen after the enjoyment of smoking Camels. Their satisfying excellence is really a revelation.

Camels are sold everywhere in scientifically sealed packages of 20 cigarettes for 20 cents.

R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, N. C.

Camel

Once it meant an animal—
now a Cigarette!

H. H. Van Loan

Scenario Writing on the Spot

This is how Mr. Van Loan, a leading photo playwright—author of "The Virgin of Stamboul"—improvises whole scenes when emergency demands quick thinking and while the director awaits the "script."

"— certainly the handiest little machine I have ever seen"

AS the story goes, the players "on location" waited while the director telephoned for help; and Van Loan came many miles on a motor cycle, his Corona slung from his shoulder, to rewrite the scenes or produce new ones. Later he said to a cameraman: "Corona is certainly the handiest little machine I have ever seen!"

Thus in unexpected ways is seen the extraordinary impetus Corona has given the general practice of typing. It has swept aside limitations of weight and bulk and made typed correspondence, manuscripts, memoranda and reports universal. Not only can it be used *anywhere*, but its fifty-dollar price, coupled with its surprising scope of operation, has rendered its use as economical as it is satisfactory.

Consult your telephone book for nearest Corona Dealer

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CORONA TYPEWRITER COMPANY, INC.
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$50, with carrying case

CORONA

The Personal Writing Machine

TRADE MARK

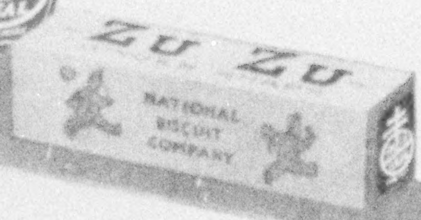
Fold it up—Take it with you—Typewrite anywhere

Offerings From Cracker Land

THE yield of earth's riches offers no greater boon to mankind than the host of National Biscuit Company products, baked for the enjoyment and nourishment of young and old.

To have on hand a ready supply of these wholesome mealtime aids is to be bountifully prepared.

NATIONAL BISCUIT COMPANY



UNEEDA BISCUIT—the world's best soda cracker.

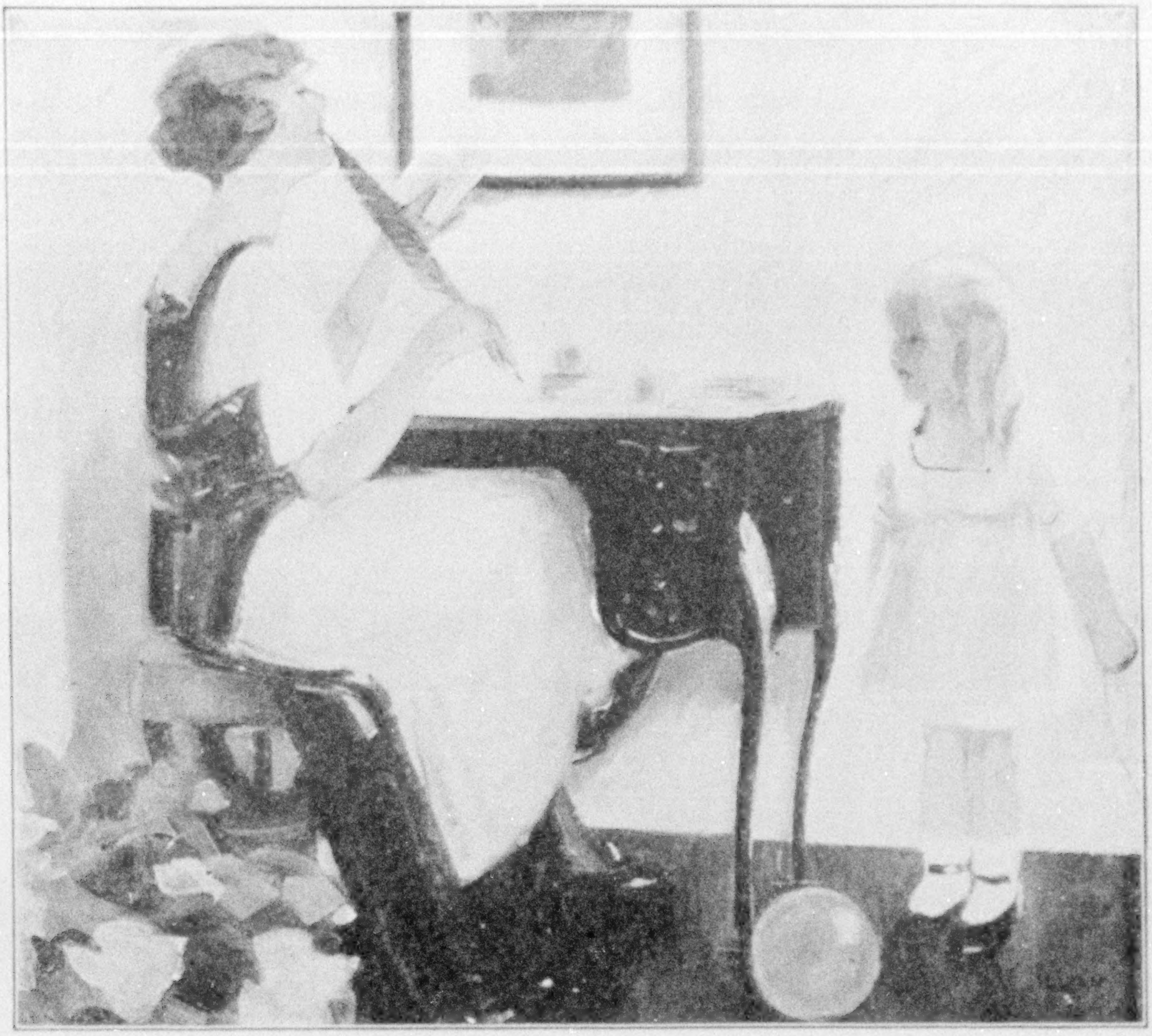
LORNA DOONE—better than any other shortbread you ever tasted.

N. B. C. GRAHAM CRACKERS—food for enjoyment and strength.

PREMIUM SODA CRACKERS—flaky, mildly salt, convenient in size.

ZU ZU GINGER SNAPS—spicy and snappy—the children's favorites.

ROYAL LUNCH—tender and slightly sweet, excellent with jams and jellies.



"And I Haven't Forgotten a Soul!"

"I HAVE learned my lesson. It is this. The people who always do the right thing at the right time—the people we come to love for their constant acts of kindness—who are always known for their thoughtfulness—these people aren't inspired. They don't act on the impulse of a moment. They simply use forethought. They are always thinking ahead about ways of showing their good will to others.

"It was last Christmas morning that this came over me, when the postman handed me dozens of Christmas cards from friends to whom I had entirely forgotten to send cards. I was so mortified that then and there I made a vow.

"And today, long before Christmas, I have made up my list of friends to send cards to this year. First, everyone who sent one to me last year, for I saved every card I got and on the back I wrote the name and address of the sender.

"Then I got out my old school class book for the friends of long ago. From the church list and the woman's club yearbook I got my acquaintances there, and from the local telephone book the correct addresses of my neighbors.

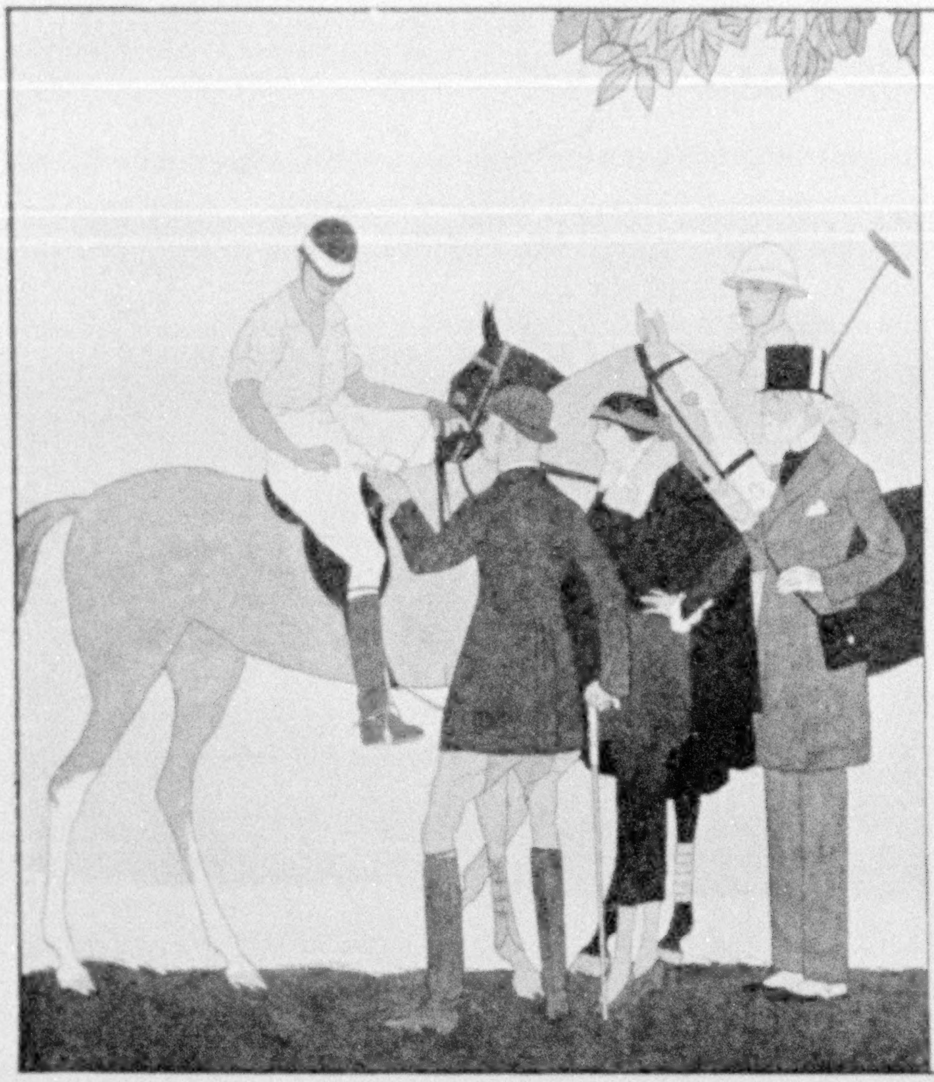
"I'm sure I haven't forgotten a soul. And what a relief it is to know that it's all done way ahead of time, that all the addresses are right, and that I can go out now and buy just the appropriate card for each person, with plenty of time to choose before the stores are crowded.

"And this year there won't be in my mail any cards from people I forgot to remember."

Send 10c for "Forget-me-nots"—a little book of days to remember

The Greeting Card Association 331 Fourth Ave New York City

Scatter Sunshine with *Christmas Cards*



EGYPTIAN

DEITIES

"The Utmost in Cigarettes"
Plain End or Cork Tip

People of culture and refinement invariably PREFER Deities to any other cigarette

30¢

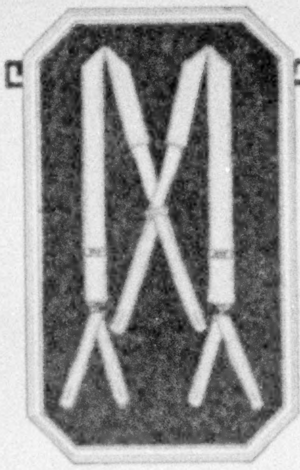
Anargyros

Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

BERWICK GORDON

Follow the
ARROW
and you follow the style in
COLLARS

Cluett, Peabody & Co. Inc. Troy, N.Y.



KADY

Suspenders

Comfort assured by the famous Double Crown Roller. Neat-hanging trousers also assured.

Quality webbing—fresh, live elastic.

Preferred by well-dressed men for a generation.

KADY Concealed

(Patented)

Worn under the shirt

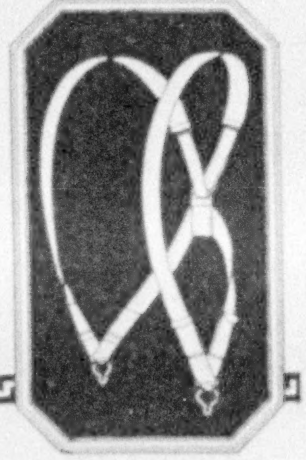
A tight belt not only is uncomfortable—it may cause disorders in the abdomen.

Wear **Kady Concealed** to hold up the trousers and wear your belt loose.

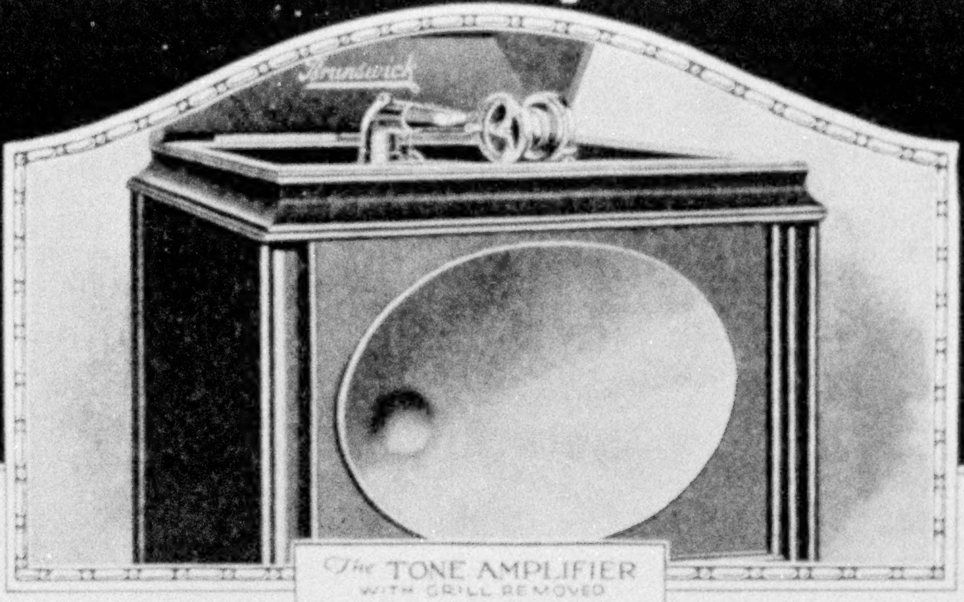
Or wear them without a belt. Easily fastened. Ask to see them.

At Leading Haberdasheries

THE OHIO SUSPENDER CO.
Mansfield, Ohio



The Brunswick Method of Reproduction



The TONE AMPLIFIER
WITH GRILL REMOVED

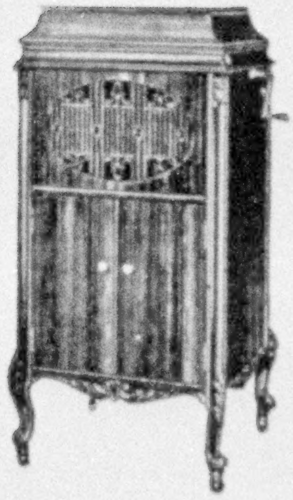
A Phonograph is as Good as Its Tone Amplifier

Much is dependent in any phonograph on what happens to the tone waves after they are transmitted from the record to the chamber of amplification.

A phonograph which might have many attractions otherwise could be ruined, so far as tone is concerned, if the tone amplifier is not scientifically constructed.

In The Brunswick all this has been of prime importance. And we are convinced that the Brunswick Tone Amplifier conforms to every acoustic principle.

It is built entirely of wood, moulded into an oval. Every angle, every help to tone wave expansion is calculated scientifically.



With this and other developments of the Brunswick Method of Reproduction, we have been able to attain for this super-instrument a reputation of tone superiority. It is not difficult to compare phonographs and their tone. Merely hear them. Your ear will quickly pick out the best even if you were blindfolded.

So hear this Brunswick. You'll be delighted with its better tone and exceptionally fine cabinet work, and you will hesitate at buying a lesser phonograph. Visit a Brunswick Dealer.

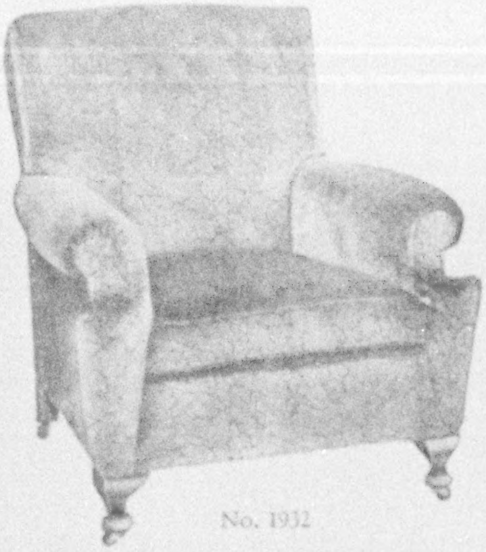
Hear also Brunswick Records—likewise superior. They can be played on any phonograph with steel or fiber needles.

THE BRUNSWICK-BALKE-COLLENDER COMPANY
General Offices: 623-633 S. Wabash Ave., Chicago

Branch Houses in Principal Cities of United States, Mexico and Canada

Canadian Distributors: Musical Merchandise Sales Co., 819 Yonge St., Toronto

Brunswick
PHONOGRAPHS AND RECORDS



No. 1932

PROUD of their leadership in style creation, Karpen designers yearly conceive and Karpen craftsmen carefully build splendid furniture of unusual beauty, comfort and durability.

Skilled workmen and modern methods unite in making possible the manufacture of this superlatively good furniture at a reasonable cost.

Send to S. Karpen & Bros., Chicago or New York, for the illustrated book, "Distinctive Designs." Karpen Dealers Everywhere

KARPEN

Do You Love Mankind's Best Friend?

SETTER PUPPIES

The Book of Dogs

By LEADING AUTHORITIES

73 Natural Color Portraits by
LOUIS AGASSIZ FUERTES

96 Pages — Many Half-tones

A Bench Show in Itself

TO fanciers, breeders, exhibitors, judges, veterinarians, and dealers, the absolutely accurate color plates and authoritative detailed history and descriptions of points, traits, and character of the leading breeds make this book indispensable around the kennels.

TO those who expect to buy a dog as home guardian, playmate of children, or companion on hunt or ramble, the Dog Book will help to wise decision and incidentally protect against tricky dealers.

BUT if you and the children merely like dogs and would like to be able to name the breeds you see, you will gain many hours of deep pleasure and much worth-while information.

CHILDREN, including the toddlers, delight in the plates and the stirring true stories of dog fidelity, heroism, and intelligence. They'll be more kind to all animals—a thought for humane society workers.

Ideal Gift for a Dog Owner

Bound in Buckram or Khaki, $2, postpaid in U. S.

CUT HERE

NATIONAL GEOGRAPHIC SOCIETY,
Washington, D. C.:

Enclosed find $...... for which send...... copies of THE BOOK OF DOGS, bound in (Buckram)(Khaki)

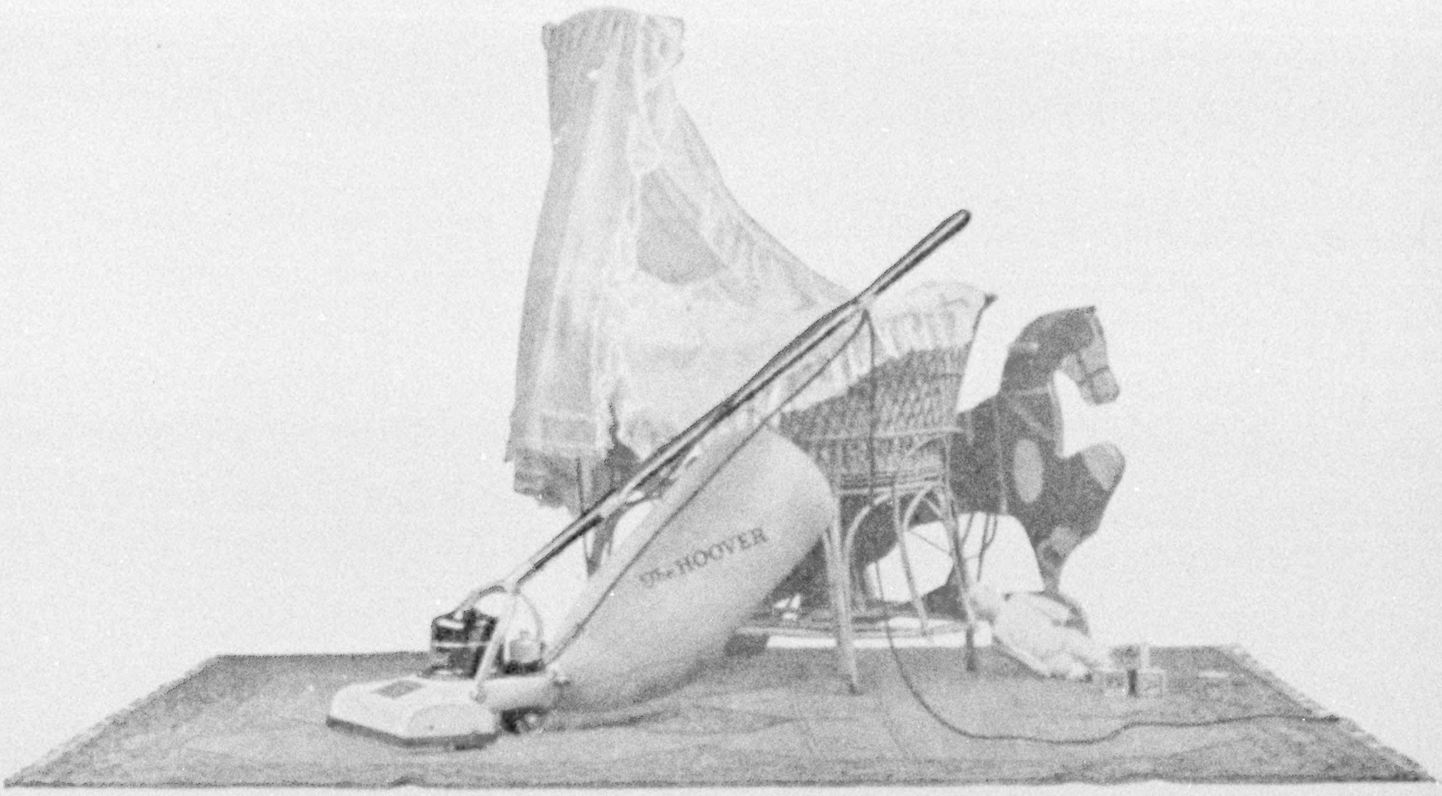
....

....

Obtainable only from the Society

10-20

The Hoover lifts the rug from the floor, like this—flutters it upon a cushion of air, gently "beats" out its embedded grit, and so prolongs its life



Immaculate rugs are safe playgrounds for the children. Clean thoroughly to protect childhood's precious health. Beat out embedded dirt and germs. Sweep up all litter that clings. Suction away all loose grime. Do it frequently. Only The Hoover performs these essentials of sanitary cleaning. And it is the largest selling electric cleaner in the world.

The HOOVER

It Beats—as it Sweeps—as it Cleans

THE HOOVER SUCTION SWEEPER COMPANY
The oldest makers of electric cleaners
North Canton, Ohio   Hamilton, Canada

FOR years, people have associated Spencerian Pens with smoothness of writing. Whether for the young undeveloped hand of a child or the experienced hand of business or professional people, there is a style of Spencerian Pen to exactly meet the particular personal requirements, and give the responsiveness and writing freedom so much desired.

SPENCERIAN PEN CO.
349 Broadway, New York

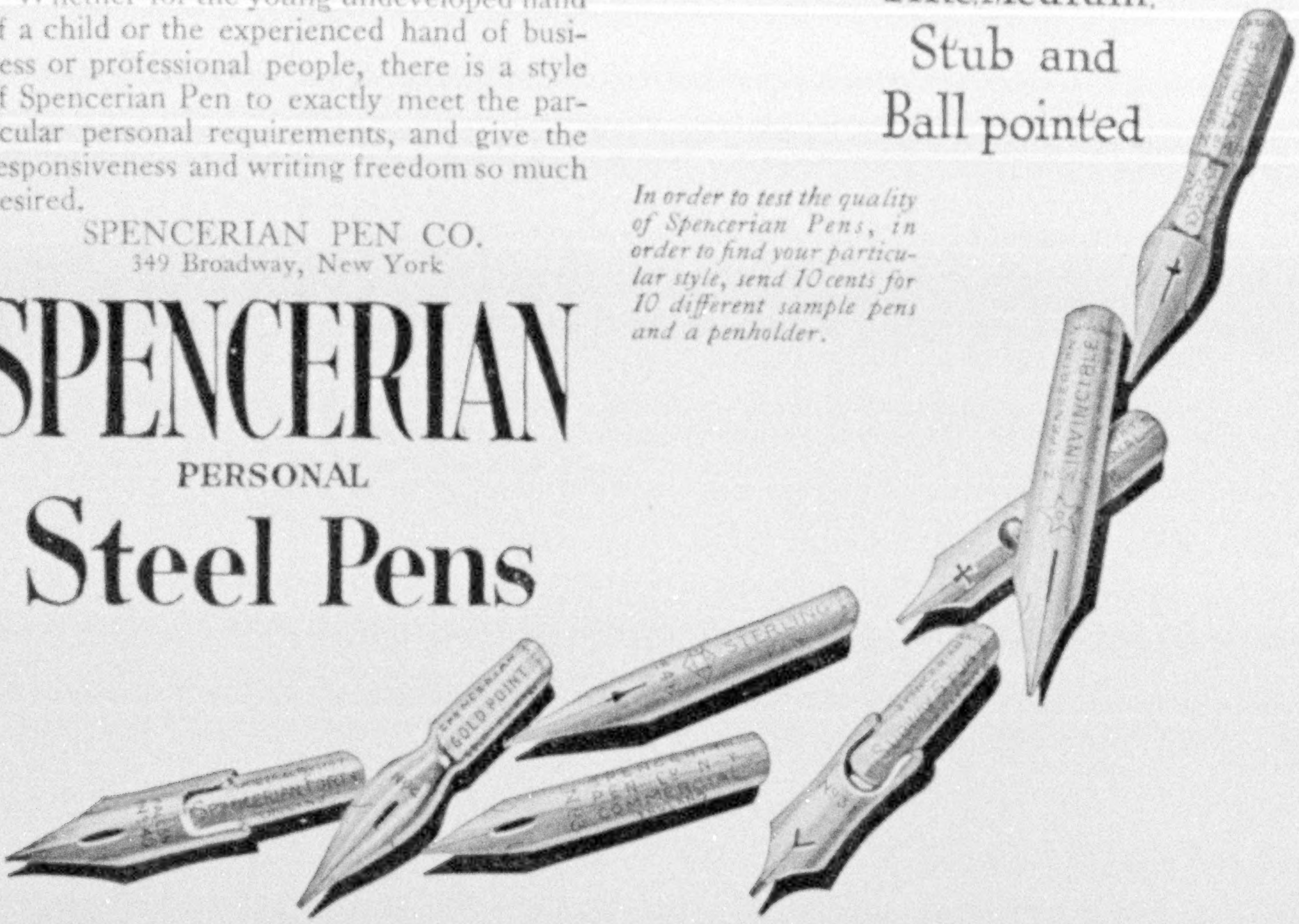
SPENCERIAN

PERSONAL

Steel Pens

Fine, Medium, Stub and Ball pointed

In order to test the quality of Spencerian Pens, in order to find your particular style, send 10 cents for 10 different sample pens and a penholder.



Kills!

No Muss—No Mixing—No Spreading

Rat Bis-Kit quickly and surely does away with rats and mice. They die outdoors. There's a different bait in each Bis-Kit. No trouble. Just crumble up. Remember the name—Rat Bis-Kit. 25c and 35c at all drug and general stores.

The Rat Biscuit Co., Springfield, Ohio

Rat Bis-Kit

For Mice Too

10¢ Buys 100 Engel "Art Corners"

Millions Billions In use to-day

NO PASTE NEEDED

Use them to mount all kodak pictures, post cards, clippings in albums

Made in Square, Round, Oval, Fancy, and Heart, of black, gray, sepia, and red gummed paper. Slip them on corners of pictures, then wet and stick. QUICK--EASY--ARTISTIC. No muss, no fuss. At photo supply, drug, and stationery stores. Accept no substitutes. There is nothing as good. **10c** brings full package and samples from

ENGEL MANUFACTURING CO.

Dept. 15K 1456 Leland Avenue, Chicago

President Suspenders

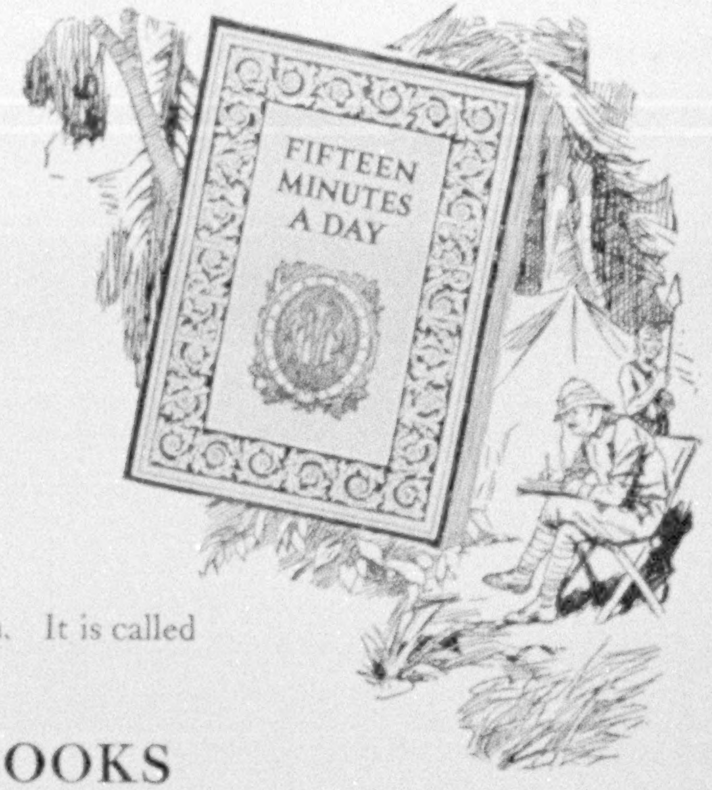
for comfort

Every pair guaranteed

MADE AT SHIRLEY MASSACHUSETTS

Roosevelt Wrote from the Jungle

For the Information Contained in This Free Book. Send for Your Copy Today



There are just as many hours in your day as there were in Theodore Roosevelt's; how did he manage to accomplish so much?

Here is part of the secret. *He was constantly on the alert for anything that would make his hours and minutes more productive.*

When he heard of Dr. Eliot's proposed Five-Foot Shelf of Books—so arranged that even fifteen minutes a day are enough—he was eager for more information. From the heart of the African jungles he wrote to a friend about it.

The information that he asked that friend to send him is contained in a book that every man and woman who is interested in success should own. It is called "Fifteen Minutes a Day," and it is free.

In it is Dr. Eliot's own story of the

FIVE-FOOT SHELF OF BOOKS

Definite Growth and Progress in Fifteen Minutes a Day

You spend more than fifteen minutes a day in reading of miscellaneous sorts.

Can you see the results of your reading at the end of a year in definite growth and progress?

Does your reading make it easier for you to think straight and talk interestingly? To meet big men and women on equal terms?

Is it giving you "the essentials of a liberal education"?

It can give you all these benefits. Here is Dr. Eliot's own statement, based on his forty years as America's foremost educator and trainer of men:

"The faithful and considerate reading of these books will give any man a liberal education even if he can devote to them but fifteen minutes a day."

Roosevelt read that statement and acted; you will be richly repaid if you, too, will act. No effort is required; no obligation. Merely clip the coupon and

Send for "Fifteen Minutes a Day"

Out of all the millions of books in the world what are the few that are really worth while? That question is answered in this free book.

Just how should a man plan his reading to make it count for most in progress and success? Dr. Eliot tells you in his own words. Hamilton Wright Mabie has a chapter on reading for success; and there are a dozen other features, all combining to make this one of the most valuable little books about books ever compiled.

To spread the knowledge of the Five-Foot Shelf of Books, we have printed a liberal edition of this free book. Your copy will go forward immediately upon receipt of your request.

MAIL THIS COUPON TODAY

P. F. COLLIER & SON COMPANY

PUBLISHERS OF GOOD BOOKS SINCE 1875

Branches and Representatives Everywhere

Mail this

P. F. COLLIER & SON COMPANY,
416 West 13th Street, New York:

Mail me the 32-page free booklet "Fifteen Minutes a Day" describing Dr. Eliot's Five-Foot Shelf of Books, and containing the valuable article by Dr. Eliot of Harvard on what and how to read for a liberal education.

Name ______________________

Address ______________________

N. G.—10-20

PYORRHOCIDE POWDER

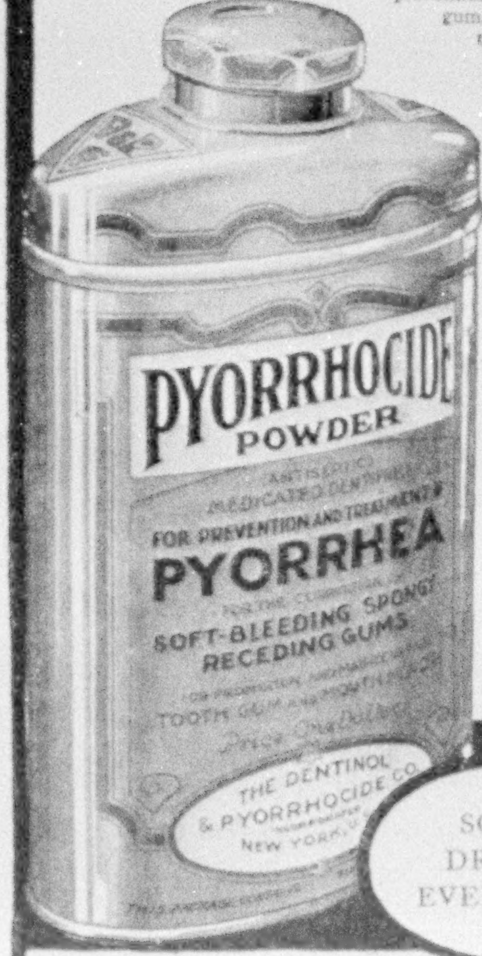
ANTISEPTIC

for Pyorrhea prevention

Gums that bleed easily—

that are soft and sensitive—warn you that pyorrhea is developing. Loss of teeth will surely follow unless pyorrhea is checked or prevented.

Dental clinics, devoted exclusively to pyorrhea research and oral prophylaxis, have *proved* the specific value of Pyorrhocide Powder for restoring and maintaining gum health. It is endorsed by the dental profession for pyorrhea treatment and prevention. It keeps the gums healthy and the teeth clean.



Pyorrhocide Powder is economical because a dollar package contains six months' supply. Sold by leading druggists and dental supply houses.

Free Sample

Write for free sample and our booklet on Prevention and Treatment of Pyorrhea.

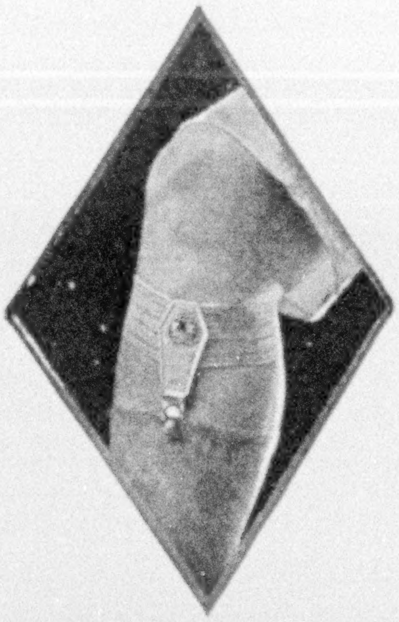
The Dentinol & Pyorrhocide Co., Inc., Sole Distributors

1478 Broadway
New York

SOLD BY DRUGGISTS EVERYWHERE

Our research work and our clinical and laboratory facilities enable us to disseminate information that is authoritative on pyorrhea treatment and prevention.

L. V. Slaght
Pres.



Take It E. Z.

Nothing adds to a man's comfort more than a garter that ***fits!***

If you don't already wear the E. Z. Garter, it will be a new experience—the feeling of a firmly held sock and no reminder that you're wearing a garter.

If your dealer cannot supply you, send his name and we will tell you who can.

THE THOS. P. TAYLOR CO.

DEPT. "G" BRIDGEPORT, CONN.

E. Z. GARTER

"Wide for Comfort"

GLIMPSE NO. 3 INTO THE SPIRIT OF AMERICA'S SECOND GREATEST INDUSTRY

"Labor with a Smile is the Measure of the 'Boss.'"

Surmounting difficulties — riding over accidental troubles — meeting emergencies "head on" and with a grin of triumph which does not relax the set lips of determination — these are the test of a man or of an Industry (which, of course, is merely a mass of men).

Talk about "troubles"! The lumber industry, every man-jack of it, knows a lot about that word. Look at the photograph above. It is a recurrent, and unavoidable, episode in the hardwood industry. A vital logging railroad, on whose steady and efficient operation depends the prompt and sure meeting of your demands for an humble kitchen chair or a refrigerator, a luxuriously carven mantel, a neat baluster for the stairway of your new home (or the floors thereof) — the thresholds — picture-mouldings — heaven knows what that you never even think of — well, that elemental necessity was completely *washed out* by floods which no industrial mastery could forefend.

You can see the job those lumber boys are up against to rebuild that railroad and get it working again in a hurry. (And they seem to be enjoying this test of their skill and their organized devotion to *your service*.)

Let those of us who sit on *hardwood chairs* — in preference to metal or monoliths — and who delight in the varied arts of the cabinet-maker, study the photograph above and then enjoy our better understanding of the things that have to happen, and to be done by *somebody*, before we can relax in the comfort and security of home.

"Easy jobs" are hardly worth doing. Hardwood lumbering is no easy job. But it is worth doing. It must be done, and done well. You require it of us.

WRITE US — AND WATCH THIS PUBLICATION FOR *GLIMPSE NO. 4*

American Hardwood Manufacturers' Association

MEMPHIS, TENNESSEE

American Oak	Cottonwood	Elm	Sycamore	Willow
Red Gum	Chestnut	Beech	Tupelo	Locust
American Walnut	Hickory	Basswood	Cherry	Magnolia
Poplar	Ash	Maple	Persimmon	et al.

(COPYRIGHT, 1920, CROSBY—CHICAGO)

zinc

Protects and equips the home

The *paint* on your walls, the *shades* at your windows, the *linoleum* on your floor, your *galvanized water tank* and *porcelain sink*—these and many other articles require zinc in their manufacture.

By furnishing the highest grade zinc products to manufacturers of these goods, the New Jersey Zinc Company makes an important contribution to the decoration, protection and equipment of the home.

Whether the product required for these various articles is Metallic Zinc, Zinc Oxide or Albalith, (our improved light-resisting Lithopone), this Company can be depended on to furnish the quality needed and the amount desired. Its experience, facilities and resources offer decided advantages to manufacturers who demand materials that are both superior and uniform in quality.

THE NEW JERSEY ZINC COMPANY, *160 Front Street,* New York
ESTABLISHED 1848

CHICAGO: Mineral Point Zinc Company, 1111 Marquette Building
PITTSBURGH: The New Jersey Zinc Co. (of Pa.), 1439 Oliver Building

Manufacturers of Zinc Oxide, Slab Zinc (Spelter), Spiegeleisen, Lithopone, Sulphuric Acid, Rolled Zinc Strips and Plates, Zinc Dust, Salt Cake and Zinc Chloride

The world's standard for Zinc products

New Jersey
zinc

SHEAFFER'S PEN

AND PENCIL

Use Those 5-Minute Waits for Your Correspondence

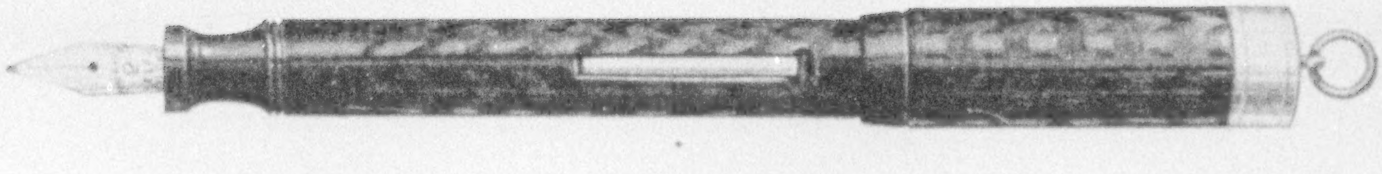
CARRY a smooth-flowing SHEAFFER Fountain Pen and acquire this sensible habit of using spare time for writing—it not only makes the wait seem short but keeps you from falling victim to "neglected correspondence." Empty ink wells and scratchy pen points are responsible for most of the procrastination that causes so many letters to begin with—"Pardon my delay." The SHEAFFER Fountain Pen inspires writing not only because it is always ready and handy but it writes so beautifully and faithfully that your thoughts flow as smoothly as the ink.

Select the SHEAFFER best suited to your hand and taste from the varied assortment all Sheaffer dealers show, $2.50 to $50.00

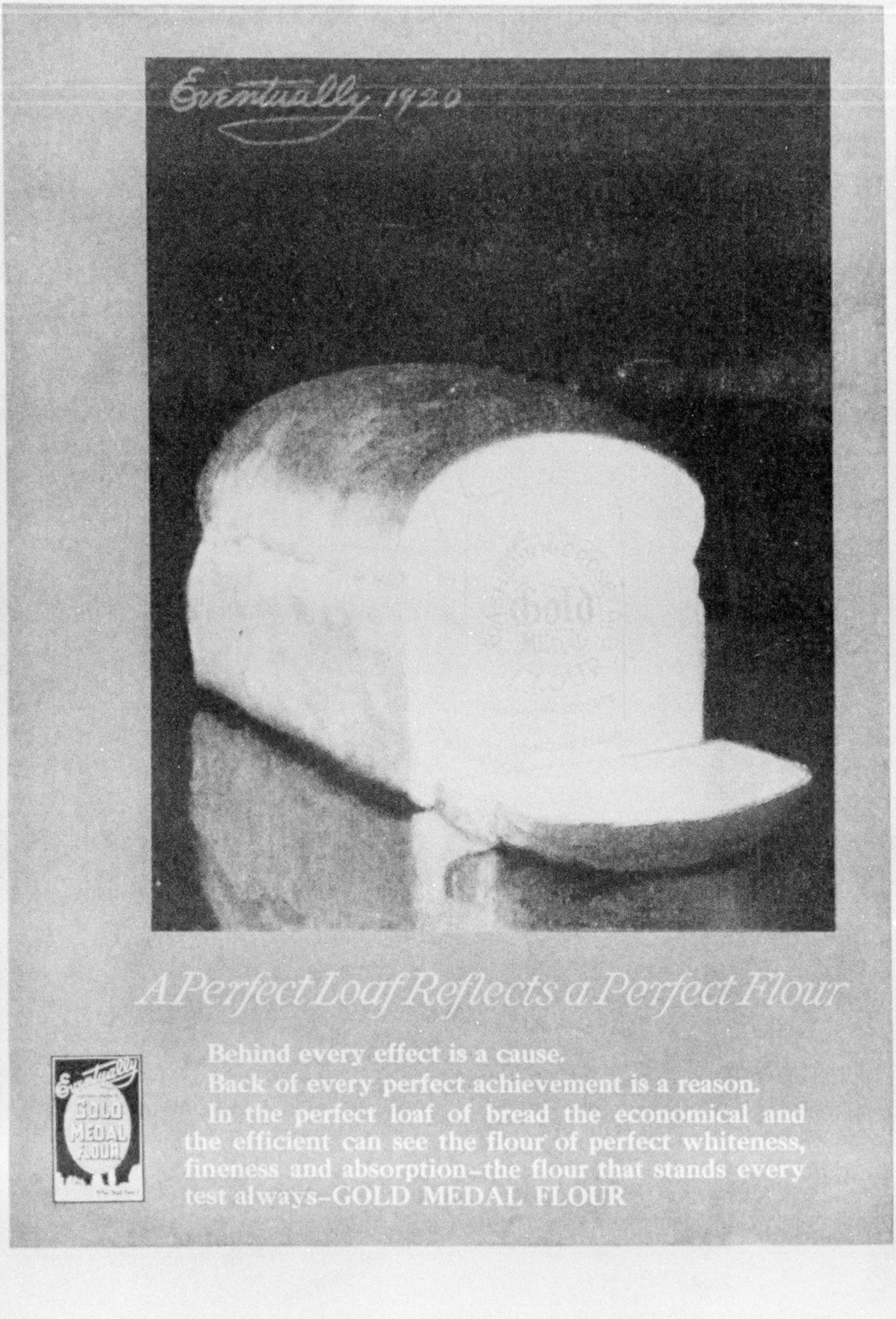
W. A. SHEAFFER PEN COMPANY, 238 SHEAFFER BUILDING, FORT MADISON, IOWA

NEW YORK CHICAGO KANSAS CITY DENVER SAN FRANCISCO

Stylish Chatelaine Model illustrated below—No. 2 M. C. rolled gold crown, $3.50; No. 29 M. C. 14k gold crown, $6.50



PRESS OF JUDD & DETWEILER, INC.
WASHINGTON, D. C.


Eventually 1920
Gold
A Perfect Loaf Reflects a Perfect Flour
Eventually
GOLD MEDAL FLOUR
Behind every effect is a cause.
Back of every perfect achievement is a reason.
In the perfect loaf of bread the economical and the efficient can see the flour of perfect whiteness, fineness and absorption–the flour that stands every test always–GOLD MEDAL FLOUR

XUM